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TO THE BUREAU OF LAND MANAGEMENT

ANNUAL PROGRESS REPORT

1980 RESULTS

VOLUME I

PHENOLOGY STUDY UNIT

PHENOLOGY AND PRODUCTION STUDIES ON

SEMI-ARID SHRUB TYPES

SUBMITTED BY WYOMING AGRICULTURAL EXPERIMENT STATION
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PHENOLOGY AND PRODUCTION STUDIES ON

SEMI-ARID SHRUB TYPES¹

1980 ANNUAL PROGRESS REPORT

VOLUME I: PHENOLOGY STUDY

BY

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December 1981

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S E C T I O N I

Phenology Study

1980

Introduction

Phenological study of important plant species in terms of production and microenvironmental variations will provide information that can be used to increase the efficiency of Bureau decision making with respect to management alternatives and disposition of natural resource areas.

Phenology studies of important shrub and grass species will provide detailed biological information related to specific changes in environmental characteristics such as time, duration, temperature, and movement. Very little detailed phenology and productivity information is available for arid land species of the western United States. Basic scientific knowledge and more precise information related to the Bureau's multiple resource management techniques will be enhanced by this phenology study.

Artemisia tridentata, Artemisia nova, Agropyron smithii, and Agropyron spicatum are the major shrub and grass species in the intermountain region on semi-arid, low elevation grazing ranges of public land. These species are especially important in the semi-arid regions of the western half of Wyoming from the Montana border on the north and the Utah and Colorado borders on the south. Their importance in adjacent states is equally significant. The ecological divergence of these

four species is very great. They are found from high elevations to very low elevations and from mesic to xeric situations. Therefore, these four species, in the development of the cooperative research program between the Bureau of Land Management and the University of Wyoming, were selected for intensive studies, to determine interrelationships of phenology, production, environment and utilization. These kinds of data are of major importance to the BLM for development of efficient and sound resource management decisions.

Intensive phenological studies were located on 12 selected exclosure areas. Initial first level evaluation areas are: Demer exclosure, Farson exclosure, Horse Creek exclosure, Shoshoni Ant #7 exclosure, and Sweetwater exclosure. Second level evaluation areas are: Bud Kimball exclosure, Cedar Mountain exclosure, Cumberland #3 exclosure, Mesa Antelope exclosure, Owl Draw exclosure, Red Wash #2 exclosure and Upper Government Draw exclosure. During the current year all sites were monitored at first level evaluation and intensity.

Phenophase descriptions and stages with numerical scales were established for four specific plant species: Agropyron smithii, A. spicatum, Artemisia nova, and A. tridentata, and for one phenological inventory of all plant species. Seasonal development (March-December) was recorded for 141 plant species in 12 exclosure areas. Individual plants of the four principal species in each of the 12 selected exclosure areas were permanently located for repeated observation.

The year 1980 included continuation and intensification of production, phenology, and productivity data collection. The second level evaluation areas were moved up to the first level evaluation process and the sampling frequency was also increased. The independent variables of

productivity, environmental and soil factors are being analyzed by statistical means. The productivity of the four major species is being examined at various phenological development stages throughout the growing season.

Objectives

The objectives of the study are to determine:

- (1) the relationship of phenodynamics with vegetation production and environmental data;
- (2) relationships of phenodynamics and environmental characteristics to grazing and management procedures.

Methods and Procedures

The numerical description of the phenological stages established in 1973 was revised during the 1979 field season. The stages were separated to allow simultaneous scoring of vegetative and reproductive development. The old and new scoring systems with modifications shown in parentheses, are listed below for comparison (page 6). The continuous numerical sets, from 1 thru 8 and 9 thru 17 for the vegetative and reproductive stages respectively, allows greater ease of quantitative analysis.

Twenty individual plants of each of the four principal species were permanently located along a 100 foot line in 12 exclosures. Every 5 ft. on the line, distance along and from the line for the closest plant, were recorded and utilized to identify individual plants at each sampling date.

Phenological measurements of Artemisia nova and A. tridentata included plant size, age, vegetative stages of growth with twig length, and reproductive stages of flowering and seed ripening with seed stalk

length. Phenological measurements of Agropyron smithii and A. spicatum included plant size, age, vegetative stages of growth with leaf width and height; reproductive stages with spike height, number of spikelets per seed head and seed head development. The new scoring system uses the same measurements for the plant growth habit.

Phenological stages and numerical scores for shrubs and forbs are:

1. = initial start of growth of the plant;
2. = early vegetative growth -- the new leaves are developing and elongating;
3. = immature vegetative growth -- the new twigs are elongating;
4. = full vegetative growth -- the leaves and twigs are fully developed;
5. = floral bud stage -- the first buds begin development to the initiation of bloom;
6. = early bloom -- includes the initiation of bloom to 10% bloom;
7. = mid-bloom -- includes 10% to 75% of bloom;
8. = full-bloom -- includes 75% bloom to 100% bloom;
9. = late bloom -- the flowers are drying and seeds are beginning to form;
10. = milk state -- the seeds are soft and immature (not well-formed);
11. = dough stage -- the seed is well-formed but still soft;
12. = ripe seed -- the seed is mature and hard;
13. = past ripe -- the seed is ripe but not shattered, and reproductive parts of the plant (seed, stalk, etc,) are mature, and are beginning to weather;

- 14. = mature vegetative -- the vegetative parts are beginning to brown to complete browning;
- 15. = mature reproductive -- the reproductive parts are curing (stem, leaf and seeds are shattering);
- 16. = fall regreening -- and/or leaf shed;
- 17. = winter dormancy.

The plant age classes of shrubs are classified as:

- 1. = seedling;
- 2. = young and small;
- 3. = intermediate age and size;
- 4. = mature age and size;
- 5. = old and decadent.

The phenological stages and numerical scores for grasses are:

- 1. = first leaf stage -- from the appearance of first leaf to appearance of first leaf to appearance of second leaf;
- 2. = second leaf stage -- from the appearance of second leaf to appearance of third leaf;
- 3. = third leaf stage -- from the appearance of the third leaf to appearance of the fourth leaf;
- 4. = fourth leaf development -- from the appearance of the fourth leaf to full leaf development;
- 5. = boot stage -- the seed stalk is elongating and the noticeable swelling of the seed head in boot;
- 6. = seed head emergence -- from the beginning of emergence of the seed head to the start of anthesis;
- 7. = early anthesis -- from initiation of anthesis to 10% of florets in bloom;

8. = mid-anthesis -- from 10% florets in bloom to 75% of florets in bloom;
9. = full anthesis -- 75% and more of the florets in bloom;
10. = milk stage -- the seed is soft and immature (not well formed);
11. = dough stage -- the seed is well-formed but still soft;
12. = ripe seed -- the seed is well-formed and hard;
13. = past ripe -- the reproductive parts begin to weather;
14. = vegetative parts browning;
15. = reproductive parts curing -- stems, leaves and seeds cast;
16. = fall regreening -- with adequate fall moisture and temperature there is fall regrowth;
17. = winter dormancy.

The maturity of Agropyron spicatum clumps are classified as: (a) seedling, (b) young, (c) intermediate, (d) mature, and (e) old. Each maturity classification can then be designated as: (a) sparse, (b) intermediate, (c) dense and (d) decadent.

The revised vegetative phenological stages and numerical scores for the shrubs and forbs are listed below, followed by the old scores:

1. = winter dormancy, (0.);
2. = initial growth, (1.);
3. = early vegetative growth -- new leaves developing, (2.);
4. = immature vegetative growth -- twigs elongating, (3.);
5. = mature vegetative growth -- twigs elongated, (4.);
6. = vegetative parts browning, (14.);
7. = fall regreening and/or leaf shed, (16.);
8. = winter dormancy, (17.).

The revised reproductive phenological stages and numerical scores for the shrubs and forbs are:

- 9. = floral bud stage -- first bud developing to initiation of bloom, (5.);
- 10. = early bloom -- initiation of bloom to 10% bloom, (6.);
- 11. = mid-bloom -- 10% to 75% bloom, (7.);
- 12. = late bloom -- flowers drying and seeds beginning to form, (9.);
- 13. = milk stage -- seed soft and immature, (10.);
- 14. = dough stage -- seed well formed but soft, (11.);
- 15. = ripe seed -- seeds mature and hard, (12.);
- 16. = reproductive parts browning -- seeds cast, (15.);

The revised vegetative phenological stages and numerical scores for grasses are:

- 1. = winter dormancy, (0.);
- 2. = first leaf stage -- from the appearance of the first leaf to the appearance of the second leaf, (1.);
- 3. = second leaf state -- from the appearance of the second leaf to the appearance of the third leaf, (2.);
- 4. = third leaf stage -- from the appearance of the third leaf to the appearance of the fourth leaf, (3.);
- 5. = fourth leaf stage -- from the appearance of the fourth leaf to full leaf development, (4.);
- 6. = vegetative parts browning, (14.);
- 7. = fall regreening, (16.);
- 8. = winter dormancy, (17.).

The revised reproductive phenological stages and numerical scores for grasses are:

The revised reproductive phenological stages and numerical scores for grasses are:

9. = Boot stage -- the seed stalk is elongating and there is noticeable swelling of the seed head in boot, (5.);
10. = seedhead emergence -- from the beginning of emergence of the seedhead to the start of anthesis, (6.0);
11. = early anthesis -- from initiation of anthesis to 50% of florets in bloom, (7-8.);
12. = full anthesis -- from 50% to 100% of florets in bloom, (8-9.);
13. = milk stage -- seed soft and immature, (10.);
14. = dough stage -- seed well formed but soft, (11.);
15. = ripe seed -- seeds hard and mature, (12.);
16. = reproductive parts browning -- seeds cast, (15.).

Additional clarification is being developed with descriptive statements which define phenological appearance of the plants or several stages within a single whole number phenology value. These are presented in Volume II. Section IV.

1980 Results

An alphabetical listing of the phenology study exclosures, exclosure location by county and the principal phenology species scored in each exclosure is given in Table I. Table II is an alphabetical listing of 141 species found in the twelve study exclosures. Table III is a phenological inventory presented by exclosure of the species listed in Table II. Table IV is an intensive phenological survey of the principal species for each exclosure including phenological stage, plant

dimensions, plant age class and percent dead material. 1973 through 1980 data on phenological development for three major growth stages are given in Table V for the species listed in Table II.

1980 phenology curves for the principal species in each exclosure were compared to curves developed from the earliest and latest dates observed from 1973 to 1979 (Figure I). The 1973 through 1979 phenology score averages were converted to the revised scoring system for the purpose of this comparison.

TABLE I. Alphabetical listing of study areas, the county where each occurs, and the prime species.

Exclosure Name	County	Prime Species
Bud Kimball	Washakie	Agropyron smithii Artemisia tridentata
Cedar Mountain	Sweetwater	Agropyron spicatum Artemisia tridentata
Cumberland #3	Lincoln	Agropyron smithii Agropyron spicatum Artemisia tridentata
Demer	Washakie	Agropyron smithii Agropyron spicatum Artemisia tridentata
Farson	Sweetwater	Agropyron smithii Artemisia tridentata
Horse Creek	Big Horn	Agropyron smithii Agropyron spicatum Artemisia nova Artemisia tridentata
Mesa Antelope	Sublette	Agropyron smithii Artemisia tridentata
Owl Draw	Natrona	Agropyron smithii Agropyron spicatum Artemisia nova Artemisia tridentata
Red Wash #2	Sweetwater	Agropyron smithii Agropyron spicatum Artemisia tridentata
Shoshone Ant #7	Fremont	Agropyron smithii Artemisia tridentata
Sweetwater	Fremont	Agropyron smithii Artemisia nova Artemisia tridentata
Upper Gov't. Draw	Fremont	Agropyron smithii Artemisia tridentata

TABLE II. LIST OF PLANT NAMES WHICH OCCURRED IN PHENOLOGY STUDY AREAS.

Code	Genus-Species	Common Name	Life Form	Longevity
ACLA	<i>Achillea lanulosa</i>	Western yarrow	Forb	Perennial
AGGL	<i>Agroseris glauca</i>	Pale agoseris	Forb	Perennial
AGCR	<i>Agropyron cristatum</i>	Crested wheatgrass	Grass	Perennial
AGSM	<i>Agropyron smithii</i>	Western wheatgrass	Grass	Perennial
AGSP	<i>Agropyron spicatum</i>	Bluebunch wheatgrass	Grass	Perennial
ALTE	<i>Allium textile</i>	Prairie onion	Forb	Perennial
AMAL	<i>Amelanchier alnifolia</i>	Saskatoon serviceberry	Shrub	Perennial
ANSE	<i>Androsace septentrionalis</i>	Rock jasmine	Forb	Annual
ANDI	<i>Antennaria dimorpha</i>	Low pussytoe	Mat-form	Perennial
ANRO	<i>Antennaria rosea</i>	Rose pussytoes	Mat-form	Perennial
ANT	<i>Antennaria</i> spp.	Pussytoe	Forb	Perennial
ARHO ²	<i>Arabis holboellii</i>	Holboell rockcress	Forb	Perennial
ARLI	<i>Arabis lignifera</i>	Woody rockcress	Forb	Perennial
ARHO	<i>Arenaria hookeri</i>	Hooker sandwort	Mat-form	Perennial
ARFE	<i>Aristida fenderiana</i>	Fendler three-awn	Grass	Perennial
ARFR	<i>Artemisia frigida</i>	Fringed sagewort	Half-shrub	Perennial
ARNO	<i>Artemisia nova</i>	Black sagebrush	Shrub	Perennial
ARSP	<i>Artemisia spinescens</i>	Bud sagewort	Half-shrub	Perennial
ARTR	<i>Artemisia tridentata</i>	Big sagebrush	Shrub	Perennial
ASCI	<i>Astragalus cibarius</i>	Silky milkvetch	Forb	Perennial
ASDI	<i>Astragalus diversifolius</i>	Meadow milkvetch	Forb	Perennial
ASKE	<i>Astragalus kentrophyta</i>	Nuttall kentrophyta m.	Forb	Perennial
ASMI ²	<i>Astragalus miser</i>	Timber milkvetch	Forb	Perennial
ASMI	<i>Astragalus missouriensis</i>	Missouri milkvetch	Forb	Perennial
ASPU	<i>Astragalus purshii</i>	Pursh Milkvetch	Forb	Perennial
ASSP	<i>Astragalus spatulatus</i>	Tufted milkvetch	Mat-form	Perennial
AST	<i>Astragalus</i> spp.	Milkvetch	Forb	Perennial
ATCO	<i>Atriplex confertifolia</i>	Shadscale saltbush	Shrub	Perennial
ATGA	<i>Atriplex gardneri</i>	Gardner saltbush	Half-shrub	Perennial
BASA	<i>Balsamorhiza sagittata</i>	Arrowleaf balsamroot	Forb	Perennial
BOGR	<i>Bouteloua gracilis</i>	Blue grama	Grass	Perennial
BRJA	<i>Bromus japonicus</i>	Japanese chess	Grass	Annual
BRTE	<i>Bromus tectorum</i>	Cheatgrass	Grass	Annual
CANU	<i>Calochortus nuttallii</i>	Sego mariposalily	Forb	Perennial
CAMI	<i>Camelina microcarpa</i>	Littlepod falseflax	Forb	Annual
CAEL	<i>Carex eleocharis</i>	Needleleaf sedge	Sedge	Perennial
CAFI	<i>Carex filifolia</i>	Threadleaf sedge	Sedge	Perennial
CAAN	<i>Castilleja angustifolia</i>	Narrowleaf Indianpaint b.	Forb	Perennial
CACH	<i>Castilleja chromosa</i>	Desert Indianpaintbrush	Forb	Perennial
CAS	<i>Castilleja</i> spp.	Indianpaintbrush	Forb	Perennial
CELA	<i>Ceratoides lanata</i>	Winterfat	Half-shrub	Perennial
CHDO	<i>Chaenactis douglasii</i>	Douglas dustymaiden	Forb	Perennial
CHE	<i>Chenopodium</i> spp.	Goosefoot	Forb	Annual
CHDE	<i>Chenopodium dessicatum</i>	Desert goosefoot	Forb	Annual
CHLE	<i>Chenopodium leptophyllum</i>	Narrowleaf goosefoot	Forb	Annual
CHNA	<i>Chrysothamnus nauseosus</i>	Rubber rabbitbrush	Shrub	Perennial
CHVI	<i>Chrysothamnus viscidiflorus</i>	Douglas rabbitbrush	Shrub	Perennial
CIR	<i>Cirsium</i> spp.	Thistle	Forb	Perennial

TABLE II. (Continued)

Code	Genus-Species	Common Name	Life Form	Longevity
CLLU	Cleome lutea	Yellow beeplant	Forb	Annual
COPA	Comandra pallida	Pale bastardtoadflax	Forb	Perennial
CORA	Cordylanthus ramosus	Branched birdbeak	Forb	Annual
CRAC	Crepis acuminata	Tapertip hawksbeard	Forb	Perennial
CRMO	Crepis modocensis	Yellowstone hawksbeard	Forb	Perennial
CRBR	Cryptantha bradburiana	Miners candle	Forb	Perennial
CRFL	Cryptantha flavoculata	Roughseed cryptantha	Forb	Perennial
CYMO	Cymopterus montanus	Mountain springparsley	Forb	Perennial
DEGE	Delphinium geyeri	Plains larkspur	Forb	Perennial
DEPI	Descurainia pinnata	Pinnate tansymustard	Forb	Annual
ERCA ²	Erigeron canadensis	Horseweed fleabane	Forb	Annual
EROC	Erigeron ochroleucus	Creamy fleabane	Forb	Perennial
ERPU	Erigeron pumilus	Low fleabane	Forb	Perennial
ERCA	Eriogonum caespitosum	Mat wildbuckwheat	Mat-form	Perennial
ERCE	Eriogonum cernuum	Nodding wildbuckwheat	Forb	Annual
ERMI	Eriogonum microthecum	Slenderbrush wildbuckwheat	Shrub	Perennial
EROV	Eriogonum ovalifolium	Cushion wildbuckwheat	Mat-form	Perennial
ERSU	Eriogonum subalpinum	Subalpine wildbuckwheat	Mat-form	Perennial
ERAS	Erysimum asperum	Plains wallflower	Forb	Perennial
GIAG	Gilia aggregata	Skyrocket gilia	Forb	Perennial
GICO	Gilia congesta	Ballhead gilia	Forb	Perennial
GIPU	Gilia pumila	Dwarf gilia	Forb	Annual
GRSP	Grayia spinosa	Spiny hopsage	Shrub	Perennial
GRSQ	Grindelia squarrosa	Curlycup gumweed	Forb	Biennial
HAGL	Halogeton glomeratus	Halogeton	Forb	Annual
HAAC	Haploppapus acaulis	Stemless goldenweed	Mat-form	Perennial
JUOS	Juniperus osteosperma	Utah juniper	Shrub-tree	Perennial
JUSC	Juniperus scopulorum	Rockymountain juniper	Shrub-tree	Perennial
KOAM	Kochia americana	Greenmolly summercypress	Half-shrub	Perennial
KOCR	Koeleria cristata	Prairie junegrass	Grass	Perennial
LAIN	Lactuca integrata	Lettuce	Forb	Perennial
LASE	Lactuca serriola	Prickly lettuce	Forb	Perennial
LARE	Lappula redowskii	Bluebur stickseed	Forb	Annual
LEDE	Lepidium densiflorum	Prairie pepperweed	Forb	Annual
LEPE	Lepidium perfoliatum	Clasping pepperweed	Forb	Annual
LEPU	Leptodactylon pungens	Granite gilia	Half-shrub	Perennial
LERE	Lewisia rediviva	Bitterroot	Forb	Perennial
LES	Lesquerella spp.	Bladderpod	Forb	Annual
LILE	Linum lewisii	Lewis flax	Forb	Perennial
LOFO	Lomatium foeniculum	Hairyseed lomatium	Forb	Perennial
LOOR	Lomatium orientale	Eastern lomatium	Forb	Perennial
LOSI	Lomatium simplex	Narrowleaf lomatium	Forb	Perennial
LUPU	Lupinus pusillus	Rusty lupine	Forb	Annual
MACA	Machaeranthera canescens	Hoary aster	Forb	Perennial
MAGR	Machaeranthera grindeloides	Pinnate woody-aster	Half-shrub	Perennial
MATA	Machaeranthera tanacetifolia	Tansyleaf aster	Forb	Annual
MELO	Mertensia longiflora	Small bluebells	Forb	Perennial
OPPO	Opuntia polyacantha	Plains pricklypear	Succulent	Perennial

TABLE II. (Continued)

Code	Genus-Species	Common Name	Life-form	Longevity
ORFA	<i>Orobanche fasciculata</i>	Tufted broomrape	Saprophyte	Perennial
ORHY	<i>Oryzopsis hymenoides</i>	Indian ricegrass	Grass	Perennial
PECL	<i>Penstemon cleburnei</i>	Cleyburn penstemon	Forb	Perennial
PEFR	<i>Penstemon fremonti</i>	Fremont penstemon	Forb	Perennial
PELA	<i>Penstemon laricifolius</i>	Larchleaf penstemon	Forb	Perennial
PEN	<i>Penstemon</i> spp.	Penstemon	Forb	Perennial
PHHO	<i>Phlox hoodii</i>	Hood's phlox	Mat-form	Perennial
PHLO	<i>Phlox longiflora</i>	Long-leaf phlox	Half-shrub	Perennial
PLPA	<i>Plantago patagonica</i>	Woolly Indianwheat	Forb	Annual
PLSP	<i>Plantago spinescens</i>	Spiny Indianwheat	Forb	Annual
POFE	<i>Poa fendleriana</i>	Mutton bluegrass	Grass	Perennial
POSE	<i>Poa secunda</i>	Sandberg bluegrass	Grass	Perennial
PSTE	<i>Psoralea tenuiflora</i>	Slimflower scurfpea	Forb	Perennial
RHTR	<i>Rhus trilobata</i>	Skunkbush sumac	Shrub	Perennial
SAIB	<i>Salsola iberica</i>	Russian thistle	Forb	Annual
SAVE	<i>Sarcobatus vermiculatus</i>	Greasewood	Shrub	Perennial
SELA	<i>Sedum lanceolatum</i>	Lanceleaf stonecrop	Forb	Perennial
SEDE	<i>Selaginella densa</i>	Spikemoss selaginella	Clubmoss	Perennial
SECA	<i>Senecio canus</i>	Woolly groundsel	Forb	Perennial
SEIN	<i>Senecia integerrimus</i>	Lambstongue groundsel	Forb	Perennial
SIAL	<i>Sisymbrium altissimum</i>	Tumbling hedgemustard	Forb	Annual
SILI	<i>Sisymbrium linifolium</i>	Narrowleaf hedgemustard	Forb	Perennial
SIHY	<i>Sitanion hystrix</i>	Squirreltail bottlebrush	Grass	Perennial
SPCO	<i>Sphaeralcea coccinea</i>	Scarlet globemallow	Forb	Perennial
STCO	<i>Stipa comata</i>	Needleandthread	Grass	Perennial
STVI	<i>Stipa viridula</i>	Green needlegrass	Grass	Perennial
SYOC	<i>Symphoricarpos occidentalis</i>	Western snowberry	Shrub	Perennial
TAOF	<i>Taraxacum officinale</i>	Common dandelion	Forb	Perennial
TECA	<i>Tetradymia canescens</i>	Gray horsebrush	Shrub	Perennial
TENU	<i>Tetradymia nuttallii</i>	Nuttall horsebrush	Shrub	Perennial
TOIN	<i>Townsendia incana</i>	Hoary townsendia	Forb	Perennial
TRDU	<i>Tragopogon dubius</i>	Yellow salsify	Forb	Biennial
TRGY	<i>Trifolium gymnocarpon</i>	Hollyleaf clover	Forb	Perennial
TRI	<i>Trifolium</i> spp.	Clover	Forb	Perennial
UMB	<i>Umbelliferae</i> fam.	False carrot	Forb	Perennial
VIAM	<i>Vicia americana</i>	American vetch	Forb	Perennial
VIVA	<i>Viola vallicola</i>	Nuttall violet	Forb	Perennial
VINU	<i>Viola nuttallii</i>	Nuttall violet	Forb	Perennial
VIO	<i>Viola</i> spp.	Violet	Forb	Perennial
VUOC	<i>Vulpia octoflora</i>	Common sixweeksgrass	Grass	Annual
WYAM	<i>Wyethia amplexicaulis</i>	Mulesear wyethia	Forb	Perennial
XASA	<i>Xanthocephalum sarothrae</i>	Broom snakeweed	Half-shrub	Perennial
YUGL	<i>Yucca glauca</i>	Small soapweed	Forb	Perennial
ZYPA	<i>Zygadenus paniculatus</i>	Foothill death camas	Forb	Perennial
ZYVE	<i>Zygadenus venenosus</i>	Death camas	Forb	Perennial

TABLE III. All species phenological survey for 1980 by date for each exclosure.

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Bud Kimball Exclosure	16
Cedar Mountain Exclosure	17
Cumberland # 3 Exclosure	18
Demer Exclosure	19
Farson Exclosure	20
Horse Creek Exclosure	21
Mesa Antelope Exclosure	23
Owl Draw Exclosure	24
Red Wash # 2 Exclosure	25
Shoshone # 7 Exclosure	26
Sweetwater Exclosure	27
Upper Government Exclosure	28

PHENOLOGICAL INVENTORY

STUDY AREA BUD KIMBAL

1980

TYPE SITE ARTQ-AGSM

		13 APR	27 APR	03 MAY	04 JUNE	19 JUNE	02 JULY	14 JULY	29 JULY	06 SEPT	21 SEPT										
SPECIES	VEG REPP	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR										

1	AGCP	0.0	0.0	0.0	0.0	0.0	5.2	9.0	5.7	13.3	5.9	14.0	6.3	14.8	6.6	15.3	6.8	16.2	7.1	0.0	
2	AGGL	0.0	0.0	0.0	0.0	0.0	5.5	9.7	6.3	13.5	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	AGSM	2.2	0.0	3.7	0.0	4.1	0.0	4.7	0.0	5.5	0.0	5.0	0.0	6.1	15.8	6.8	16.0	8.0	16.8	7.1	17.0
4	AGSP	3.1	0.0	3.8	0.0	4.6	0.0	5.5	0.0	5.6	0.0	5.8	0.0	6.2	0.0	6.5	0.0	6.8	0.0	7.1	0.0
5	ALTE	3.3	0.0	4.2	0.0	4.4	9.4	5.7	13.3	6.9	14.9	0.0	0.0	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
6	ANCI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	15.5	6.4	16.0	6.9	16.7	8.0	17.0	0.0	0.0	0.0	0.0
7	ANCC	0.0	0.0	0.0	0.0	0.0	0.0	3.8	10.2	0.0	0.0	6.2	15.1	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
8	ARHC2	0.0	0.0	0.0	0.0	4.5	10.4	5.9	14.6	6.6	14.5	7.0	15.0	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
9	ARTR	2.2	0.0	2.9	0.0	3.0	0.0	3.6	0.0	4.1	9.1	4.1	9.0	4.6	9.5	4.6	9.5	5.1	9.9	5.5	11.3
10	ASPU	0.0	0.0	0.0	0.0	4.6	10.6	5.3	14.2	6.1	15.9	6.4	16.6	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
11	BDER	2.6	0.0	3.2	0.0	3.9	0.0	4.6	0.0	4.8	0.0	6.0	0.0	6.2	0.0	6.7	0.0	7.1	0.0	7.2	0.0
12	BRJA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	11.5	6.0	14.2	6.9	16.2	6.9	16.5	6.9	16.8	8.0	17.0
13	BRTE	3.8	0.0	4.2	0.0	4.5	0.0	5.6	13.0	6.8	14.2	6.9	15.0	6.9	16.3	6.9	16.6	6.0	16.8	7.0	17.0
14	CACH	3.2	0.0	4.4	0.0	4.6	9.0	5.0	12.2	6.1	13.6	6.7	15.0	7.5	16.6	8.0	17.0	0.0	0.0	0.0	0.0
15	CANU	0.0	0.0	3.6	0.0	3.8	0.0	4.5	0.0	4.8	11.7	5.6	13.8	6.7	14.8	8.0	17.0	0.0	0.0	0.0	0.0
16	CHE	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	4.6	9.3	0.0	0.0	6.8	16.5	6.0	17.0	0.0	0.0	0.0	0.0
17	CRPC	3.2	0.0	3.5	0.0	3.8	0.0	4.8	11.1	5.3	13.5	6.9	15.2	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
18	DEFI	0.0	0.0	0.0	0.0	3.2	0.0	4.1	12.0	6.1	16.1	6.3	16.4	6.9	15.9	8.0	17.0	0.0	0.0	0.0	0.0
19	ERPU	3.1	0.0	4.1	0.0	4.3	9.3	4.9	11.6	6.1	13.3	6.5	15.5	6.8	16.9	8.0	17.0	7.2	17.0	7.3	0.0
20	GIPU	0.0	0.0	0.0	0.0	0.0	0.0	3.5	9.0	6.9	15.8	6.9	16.5	6.9	16.6	8.0	17.0	0.0	0.0	0.0	0.0
21	HAEL	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	4.5	0.0	4.6	0.0	5.8	0.0	6.0	0.0	6.1	0.0	6.2	0.0
22	KDCR	3.8	0.0	3.9	0.0	4.8	0.0	5.2	0.0	5.5	0.0	5.8	0.0	5.9	0.0	6.2	0.0	6.6	0.0	7.2	0.0
23	LARE	2.4	0.0	0.0	0.0	3.1	0.0	4.5	12.8	5.5	13.7	0.0	0.0	6.9	15.5	8.0	17.0	0.0	0.0	0.0	0.0
24	LEDE	0.0	0.0	0.0	0.0	3.2	9.1	4.4	11.8	0.0	0.0	6.3	15.5	6.9	16.4	8.0	17.0	0.0	0.0	0.0	0.0
25	LERE	3.6	0.0	3.7	0.0	3.8	0.0	6.8	10.4	6.9	13.4	6.9	15.2	6.9	16.3	8.0	17.0	0.0	0.0	0.0	0.0
26	LOCR	3.4	9.1	4.5	10.3	4.7	13.0	5.6	15.0	6.9	16.4	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	PACA	0.0	0.0	0.0	0.0	0.0	0.0	4.3	11.4	5.5	12.9	5.9	13.7	6.9	15.5	8.0	17.0	0.0	0.0	0.0	0.0
28	MAEL	2.2	0.0	3.8	0.0	4.2	9.1	5.1	11.8	5.8	14.7	6.1	15.0	6.9	15.2	8.0	17.0	0.0	0.0	0.0	0.0
29	OPPO	1.0	0.0	1.0	0.0	3.0	9.0	4.3	9.8	4.8	10.9	5.0	13.3	5.5	14.6	5.7	15.5	6.0	16.3	6.2	16.9
30	PHPO	3.2	9.1	4.6	11.1	4.8	11.9	5.6	14.2	6.0	15.9	6.4	16.3	6.9	16.9	8.0	17.0	7.2	17.0	7.4	17.0
31	PLPA	2.5	0.0	3.0	0.0	0.0	0.0	4.1	10.8	6.8	14.1	6.9	15.0	6.9	15.7	6.9	16.3	6.9	16.7	8.0	17.0
32	POSE	4.2	0.0	4.6	0.0	4.9	0.0	6.1	0.0	6.7	0.0	6.9	0.0	8.0	0.0	8.0	0.0	8.0	0.0	7.0	0.0
33	SIHY	0.0	0.0	4.1	0.0	4.7	0.0	5.1	9.5	5.8	11.5	6.0	13.5	6.7	15.4	6.0	17.0	7.0	17.0	7.1	17.0
34	SPCO	0.0	0.0	0.0	0.0	3.1	0.0	3.9	0.0	5.4	0.0	5.8	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	STCO	2.7	0.0	3.5	0.0	4.3	0.0	4.8	0.0	5.2	0.0	5.5	0.0	5.8	0.0	6.3	0.0	6.6	0.0	7.3	0.0
36	STVI	2.4	0.0	4.2	0.0	4.5	0.0	4.9	9.2	5.3	10.8	5.5	13.0	5.8	15.6	6.1	16.5	7.3	17.0	0.0	0.0
37	TACF	3.2	0.0	3.8	0.0	4.0	9.0	5.8	15.0	5.5	15.3	5.8	16.0	6.9	16.9	8.0	17.0	7.4	0.0	7.5	9.3
38	TRCU	3.1	0.0	3.5	0.0	3.7	0.0	4.7	10.0	4.8	10.5	5.5	14.0	6.1	15.0	6.5	16.0	6.9	16.9	7.1	17.0
39	VIAM	0.0	0.0	4.0	0.0	4.2	9.0	5.0	12.7	5.9	13.5	6.3	15.0	6.9	16.3	8.0	17.0	0.0	0.0	0.0	0.0
40	VINU	2.4	0.0	0.0	0.0	4.5	10.9	5.6	15.5	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA CEDAR MT

1980

TYPE SITE ARTR-AGSP

		26 APR		02 MAY		19 MAY		02 JUNE		16 JUNE		30 JUNE		14 JULY		28 JULY		11 AUG		30 AUG		20 SEPT	
SPECIES		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR

1	AGCP	2.0	0.0	4.0	0.0	4.4	0.0	4.6	0.0	5.4	0.0	5.6	10.3	5.8	10.9	5.8	12.7	6.1	14.9	6.4	15.2	6.6	15.8
2	AGSP	2.7	0.0	3.5	0.0	4.5	0.0	0.0	0.0	5.7	0.0	5.8	10.2	5.9	12.6	5.9	13.3	6.0	16.2	0.0	0.0	6.4	16.7
3	ARHO	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	4.5	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	ARPO2	2.1	0.0	3.1	0.0	4.3	0.0	4.6	11.5	4.9	12.6	5.4	13.6	6.3	14.6	6.8	15.5	6.9	16.9	8.0	17.0	0.0	0.0
5	ARSP	2.8	0.0	3.5	0.0	4.1	0.0	4.7	9.8	4.8	9.9	5.1	11.2	5.2	11.4	5.6	12.9	5.7	0.0	6.4	15.5	6.6	16.9
6	ARTR	2.5	0.0	3.1	0.0	3.6	0.0	3.7	0.0	4.2	0.0	4.2	0.0	4.2	9.3	4.3	9.8	4.6	9.8	4.6	9.8	4.6	9.9
7	ASPU	0.0	0.0	0.0	0.0	3.9	0.0	4.6	10.8	4.6	11.4	5.0	13.0	5.6	14.5	6.5	15.9	6.6	16.3	6.8	16.8	6.9	16.9
8	ATCO	1.5	0.0	3.7	0.0	3.9	0.0	4.6	9.2	4.8	9.9	5.2	11.3	5.5	0.0	5.6	13.6	5.8	14.3	5.9	14.9	6.1	15.5
9	ATGA	1.5	0.0	3.2	0.0	4.3	0.0	4.6	9.3	4.8	10.2	5.1	10.7	5.4	13.1	5.5	13.8	5.6	15.0	6.0	15.5	6.1	15.9
10	CELA	2.4	0.0	3.6	0.0	4.1	0.0	4.3	0.0	4.5	0.0	5.0	11.3	5.6	11.9	5.7	13.2	5.9	13.8	6.0	14.4	6.3	15.5
11	CHE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	10.0	6.1	13.2	0.0	0.0	0.0	0.0	0.0	0.0	6.5	15.9
12	CHVI	2.0	0.0	3.2	0.0	3.7	0.0	4.3	0.0	4.5	0.0	4.6	0.0	5.0	9.1	5.3	9.5	5.7	10.4	6.1	10.8	6.3	11.8
13	COFA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	9.0	0.0	0.0	5.0	11.2	5.8	14.5	6.0	15.1	6.7	16.2
14	CRMD	0.0	0.0	0.0	0.0	3.4	0.0	4.1	9.1	4.3	9.6	4.9	11.3	5.7	15.2	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
15	CYPO	0.0	0.0	3.7	0.0	4.6	9.1	4.9	11.9	5.3	12.4	5.5	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	ERPU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	11.5	5.2	12.4	5.3	13.0	5.6	13.5	5.6	15.0	0.0	0.0
17	ERCV	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	11.8	5.4	13.5	6.2	14.4	6.4	15.4	6.5	15.9
18	HAAC	0.0	0.0	3.3	0.0	3.8	0.0	4.2	9.3	4.6	10.5	5.1	11.3	5.6	14.2	6.2	16.7	6.2	16.9	6.4	17.0	6.6	17.0
19	KOAM	0.0	0.0	2.1	0.0	3.4	0.0	4.1	0.0	4.6	0.0	4.8	0.0	5.3	10.7	5.5	11.5	5.9	12.8	6.0	14.3	6.2	14.6
20	LARE	0.0	0.0	0.0	0.0	0.0	0.0	4.2	9.5	0.0	0.0	5.1	12.7	5.8	15.5	6.9	16.5	6.9	16.9	8.0	17.0	0.0	0.0
21	LPPO	1.0	0.0	1.0	0.0	1.0	0.0	3.0	9.0	3.1	9.1	3.2	9.3	4.1	9.7	4.9	12.5	0.0	0.0	5.5	14.3	5.8	15.6
22	DRFY	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	4.5	9.1	4.7	10.0	5.1	14.1	6.1	16.4	6.1	16.5	6.4	16.7	6.6	16.9
23	PEFR	3.5	0.0	3.7	0.0	0.0	0.0	3.9	0.0	4.6	9.0	4.6	9.4	5.3	10.2	5.5	13.0	6.4	15.9	0.0	0.0	0.0	0.0
24	PHHO	0.0	0.0	3.4	0.0	3.7	0.0	4.6	11.2	4.9	11.7	5.2	13.8	5.7	16.2	5.8	16.6	6.7	16.9	6.8	17.0	6.9	17.0
25	PHLO	0.0	0.0	3.8	0.0	4.1	0.0	4.3	9.2	4.7	11.5	5.0	11.7	5.3	14.4	5.5	15.5	6.2	16.9	6.8	17.0	6.9	17.0
26	POSE	2.5	0.0	3.2	0.0	3.4	0.0	4.4	0.0	5.6	10.1	5.8	11.4	6.5	13.8	6.7	14.6	6.9	16.2	6.9	16.4	6.9	16.9
27	SAVE	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	4.1	0.0	4.5	0.0	5.2	0.0	5.5	0.0	5.6	0.0	5.8	0.0	6.0	0.0
28	SIAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	12.6	5.4	13.1	5.8	14.7	6.7	16.8	0.0	0.0	6.9	16.9
29	SILI	0.0	0.0	0.0	0.0	4.3	0.0	4.6	9.4	4.9	11.6	5.5	12.3	5.8	13.1	6.5	15.2	6.2	16.9	6.7	17.0	6.9	17.0
30	SIHY	2.1	0.0	3.7	0.0	4.5	0.0	4.8	0.0	5.4	9.4	5.7	10.3	5.8	11.6	6.1	13.5	6.2	16.2	6.5	16.5	6.9	16.8
31	SPCO	0.0	0.0	3.7	0.0	0.0	0.0	4.5	9.0	4.8	9.3	5.0	11.2	5.1	11.4	6.1	16.1	6.1	16.3	6.4	16.7	6.5	16.9
32	TAOF	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	4.6	0.0	6.3	0.0	6.4	0.0	0.0	0.0	8.0	0.0	0.0	0.0
33	TENU	0.0	0.0	3.2	0.0	3.6	0.0	3.8	9.0	4.4	0.0	4.6	9.3	5.1	10.2	5.4	13.1	6.2	14.9	6.5	15.5	6.9	15.9
34	TOIN	0.0	0.0	0.0	0.0	0.0	0.0	3.5	9.0	0.0	0.0	5.0	11.4	5.2	11.9	5.4	12.6	0.0	0.0	6.3	15.2	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA CUMBER #3

1980

TYPE SITE ARTR-AGSM-AGSP

		20 MAY		11 JUNE		17 JUNE		01 JULY		15 JULY		04 AUG		12 AUG		30 AUG		20 SEPT	
SPECIES		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR

1	ACFI	0.0	0.0	0.0	0.0	4.8	9.4	0.0	0.0	5.2	11.7	5.6	12.0	6.0	13.5	6.3	16.2	6.4	16.6
2	AGEL	3.7	0.0	4.8	11.5	5.4	11.8	6.1	12.9	6.4	14.8	6.6	15.6	6.9	16.1	0.0	0.0	0.0	0.0
3	AGSM	4.7	0.0	5.5	0.0	5.5	0.0	5.8	11.0	6.0	11.8	6.1	14.1	6.3	15.0	6.5	15.8	7.1	16.6
4	AGSP	4.8	0.0	5.7	0.0	5.8	10.6	5.9	10.9	5.9	12.6	6.2	16.9	6.4	16.4	6.4	16.9	7.1	17.0
5	AMAL	3.5	0.0	4.3	11.2	4.5	12.9	4.7	14.2	4.9	14.7	5.3	15.2	5.5	15.8	6.0	16.9	6.4	17.0
6	ANCI	4.1	9.5	4.4	13.2	5.5	14.1	6.2	15.8	6.6	16.5	6.9	16.9	7.0	17.0	0.0	0.0	0.0	0.0
7	ANSE	0.0	0.0	4.4	10.3	4.8	0.0	0.0	0.0	6.3	15.4	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
8	ARFC2	4.2	0.0	4.9	12.3	6.0	12.8	6.2	13.8	6.4	14.7	6.8	16.0	6.9	16.7	6.9	16.9	7.1	17.0
9	ARTR	3.7	0.0	4.0	0.0	4.1	0.0	4.2	9.2	4.4	9.3	4.5	9.7	4.6	9.8	4.7	9.9	5.4	11.0
10	ASCI	3.8	0.0	4.7	12.1	4.8	12.8	5.7	13.9	5.9	15.0	6.8	16.7	8.0	17.0	0.0	0.0	0.0	0.0
11	ASCI	4.5	9.8	5.0	13.2	5.2	13.5	5.6	11.9	5.6	12.2	5.8	13.3	5.9	14.7	6.1	15.1	6.7	16.9
12	ASMI	3.6	0.0	4.2	11.2	4.6	11.5	0.0	0.0	5.4	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	ASFL	4.7	0.0	5.5	13.8	5.9	14.3	5.5	13.2	5.8	14.8	6.4	15.9	6.6	16.5	6.9	16.9	8.0	17.0
14	BKTE	0.0	0.0	4.0	9.9	4.8	10.3	6.4	10.7	6.7	12.5	6.8	14.7	6.8	15.2	6.9	16.9	8.0	17.0
15	CANL	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	12.1	6.3	13.8	6.7	14.6	6.9	16.9	8.0	17.0
16	CAS	4.3	0.0	4.8	10.5	4.9	11.1	5.2	11.8	5.4	13.2	5.9	14.8	6.1	16.0	0.0	0.0	0.0	0.0
17	CHS	0.0	0.0	4.4	0.0	4.6	9.8	0.0	0.0	4.8	11.7	5.4	13.2	5.9	14.7	6.2	15.5	6.7	16.3
18	CHVI	4.1	0.0	4.6	0.0	4.7	0.0	4.8	9.1	5.0	9.3	5.3	10.9	5.5	11.2	6.3	12.8	6.6	16.3
19	COFA	4.3	0.0	4.7	9.9	4.8	10.8	5.7	12.8	5.8	15.5	5.9	16.0	6.0	16.5	6.1	16.9	6.5	17.0
20	CORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.2	5.0	11.1	5.3	11.8	6.3	13.6	6.8	16.0
21	CKAC	3.9	0.0	6.1	9.8	6.2	10.9	6.8	16.5	6.9	16.7	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
22	CRFL	0.0	0.0	4.7	0.0	4.8	9.2	5.6	13.1	5.8	13.5	5.9	14.9	6.0	15.9	6.1	16.8	6.6	0.0
23	CYMC	0.0	0.0	6.1	14.3	6.2	14.5	0.0	0.0	6.8	15.8	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
24	DEPI	0.0	0.0	5.3	12.8	5.5	13.0	6.2	14.5	6.5	15.3	6.9	16.3	6.9	16.8	6.9	16.9	8.0	17.0
25	ERCV	0.0	0.0	0.0	0.0	0.0	0.0	6.1	11.9	6.2	12.3	6.5	14.2	0.0	0.0	0.0	0.0	0.0	0.0
26	ERPU	0.0	0.0	0.0	0.0	0.0	0.0	6.2	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	FRPU	0.0	0.0	4.8	12.1	5.5	12.8	5.5	13.6	6.7	14.2	6.9	16.6	6.9	15.9	8.2	17.0	0.0	0.0
28	FOJU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	11.7	0.0	0.0	0.0	0.0	0.0	0.0
29	LAFE	0.0	0.0	5.5	10.8	5.8	11.4	6.8	15.8	6.9	15.9	6.9	16.5	6.9	16.7	6.9	16.9	8.0	17.0
30	LASC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.0	5.1	10.8	5.7	11.3	0.0	0.0	0.0	0.0
31	LUSI	4.5	12.1	6.2	14.2	6.5	14.8	6.9	15.4	0.0	0.0	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
32	MELO	4.5	11.5	5.5	13.2	5.7	13.5	5.9	13.9	6.4	16.5	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
33	OPFG	1.0	0.0	2.5	0.0	3.8	9.1	4.6	9.7	4.8	12.3	5.3	13.8	5.5	14.4	5.9	15.9	6.0	16.8
34	CRB	0.0	0.0	0.0	0.0	4.6	0.0	4.8	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	CRFY	3.9	0.0	4.5	0.0	4.8	9.1	4.9	10.7	5.1	12.5	6.0	14.9	6.3	15.3	6.4	16.9	8.0	17.0
36	PELA	0.0	0.0	0.0	0.0	0.0	0.0	4.9	13.3	5.2	13.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	PHFC	4.3	0.0	5.8	11.5	5.8	11.9	6.1	12.3	6.2	14.5	6.8	16.6	6.9	16.9	8.0	17.0	0.0	0.0
38	PHLO	4.3	0.0	5.8	11.4	6.1	11.6	6.3	11.9	6.3	14.6	6.5	15.8	6.8	16.7	6.9	16.9	8.0	17.0
39	PHPU	4.6	11.5	4.9	13.0	5.1	13.3	0.0	0.0	5.8	15.5	6.1	16.5	6.7	16.8	0.0	0.0	0.0	0.0
40	PDAM	4.6	0.0	5.4	10.3	5.6	10.6	5.8	12.2	5.8	12.8	6.1	14.5	6.3	15.7	6.4	16.2	7.4	16.5
41	PDSE	4.5	0.0	5.9	11.6	6.0	11.8	5.7	12.5	6.0	12.8	6.1	14.0	6.3	15.0	6.5	16.7	7.2	16.9
42	PGSE	4.5	0.0	6.2	0.0	6.5	0.0	6.9	11.8	6.7	13.8	6.9	16.0	6.9	16.3	6.9	16.7	7.4	16.9
43	SEIN	3.2	0.0	6.1	11.6	6.2	12.1	6.8	13.5	6.9	14.3	6.9	16.0	6.9	16.5	6.9	16.9	8.0	17.0
44	SIAL	0.0	0.0	4.6	10.6	4.8	11.2	5.7	12.8	5.9	14.0	6.3	15.8	6.6	16.5	6.9	16.9	8.0	17.0
45	SIHY	4.2	0.0	5.7	9.4	5.9	9.9	5.8	10.9	5.8	11.9	6.0	14.8	6.3	15.6	6.9	16.7	6.9	16.9
46	STCO	3.4	0.0	4.3	0.0	4.5	9.4	4.8	10.9	5.4	13.8	6.0	15.7	6.3	16.2	6.4	16.9	6.6	17.0
47	STCO2	0.0	0.0	0.0	0.0	0.0	0.0	4.9	11.1	5.4	13.3	6.1	14.8	6.4	15.9	6.5	16.9	6.8	17.0
48	SYCC	4.2	0.0	4.5	9.3	4.7	9.5	4.8	0.0	4.9	0.0	5.2	12.0	5.5	13.8	6.3	15.2	0.0	0.0
49	TACF	0.0	0.0	5.4	12.5	5.8	13.5	5.9	0.0	5.9	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	TECA	3.5	0.0	4.6	0.0	4.7	0.0	5.4	0.0	5.6	9.6	5.8	11.6	5.9	13.1	6.1	14.2	6.3	16.4
51	THAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	14.6	6.8	15.8	6.9	16.9	0.0	0.0	0.0	0.0
52	TRDU	0.0	0.0	0.0	0.0	0.0	0.0	5.1	9.8	5.3	11.3	5.6	12.5	6.3	14.8	6.9	16.9	7.2	9.8
53	TREY	3.9	0.0	5.5	11.7	5.6	11.9	5.9	12.5	5.9	15.5	6.2	16.5	6.4	16.8	6.6	16.9	6.9	17.0
54	VINU	4.2	11.1	5.5	13.7	5.8	14.1	6.1	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55	ZIPA	3.8	0.0	4.7	10.8	5.5	11.2	6.5	11.9	6.7	13.0	6.9	16.1	6.9	16.8	6.9	16.9	8.0	17.0

PHENOLOGICAL INVENTORY

STUDY AREA DEMER

1980

TYPE SITE ARTR-AGSM-AGSP

		04 APR		27 APR		03 MAY		23 MAY		04 JUNE		19 JUNE		02 JULY		14 JULY		28 JULY		21 AUG		05 SEPT		20 SEPT	
	SPECIES	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
*****-----*****																									
1	AGSM	3.3	0.0	4.2	0.0	4.5	0.0	5.4	0.0	4.9	0.0	5.5	0.0	5.4	14.0	6.4	15.6	6.7	15.8	6.8	16.4	7.1	0.0	7.1	0.0
2	AGSP	3.8	0.0	4.2	0.0	4.5	0.0	5.4	0.0	4.9	0.0	5.5	0.0	5.4	14.0	6.4	15.6	6.7	15.8	6.8	16.4	7.1	0.0	7.1	0.0
3	ALTE	3.2	0.0	4.5	9.2	4.8	9.4	5.4	11.8	5.7	12.8	5.0	13.9	6.5	15.0	6.9	16.5	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
4	ARTR	2.2	0.0	2.1	0.0	3.2	0.0	3.8	0.0	3.8	0.0	4.2	9.1	4.2	9.1	4.6	9.4	4.6	9.4	4.8	9.6	5.1	10.6	5.1	10.6
5	ASHI2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	4.0	0.0	5.3	13.0	6.2	15.8	6.3	16.1	6.7	16.9	6.7	17.0	6.7	17.0
6	BDER	3.9	0.0	4.2	0.0	4.9	0.0	5.5	11.9	5.8	12.2	6.3	14.5	6.6	15.3	6.9	16.4	6.9	16.6	8.0	17.0	7.3	17.0	7.3	17.0
7	CANL	3.2	0.0	3.8	0.0	4.0	0.0	4.3	9.2	4.8	9.8	5.5	12.7	6.4	13.9	6.9	14.9	6.9	16.3	7.4	17.0	7.6	17.0	7.6	17.0
8	CAS	2.3	0.0	0.0	0.0	0.0	0.0	4.5	11.4	4.8	11.8	5.3	13.3	6.2	14.8	6.9	16.8	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
9	CHE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	9.8	5.0	10.8	5.8	13.5	6.8	15.2	6.9	15.8	6.9	16.9	0.0	0.0	0.0	0.0
10	CYMO	3.6	9.0	4.8	9.8	5.1	11.9	3.4	14.2	5.7	15.6	6.3	16.0	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	DEGE	3.4	0.0	4.2	0.0	4.4	9.1	4.6	11.3	4.8	11.8	5.8	13.7	6.6	15.6	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
12	DEPI	2.0	0.0	3.2	0.0	0.0	0.0	4.8	13.0	5.1	13.8	0.0	0.0	6.3	15.6	6.9	16.4	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
13	ERPU	0.0	0.0	0.0	0.0	4.3	9.1	4.8	11.4	4.9	11.7	5.4	13.5	5.6	15.7	6.7	16.6	6.8	16.8	6.9	17.0	0.0	0.0	0.0	0.0
14	KCCR	0.0	0.0	3.8	0.0	0.0	0.0	4.5	0.0	4.8	0.0	5.1	0.0	5.5	0.0	6.1	0.0	6.3	0.0	6.8	7.3	0.0	0.0	0.0	0.0
15	LASC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	4.3	0.0	0.0	0.0	5.4	9.7	6.4	15.5	6.8	16.7	6.8	16.7
16	LARE	0.0	0.0	0.0	0.0	0.0	0.0	4.2	12.5	4.8	12.9	6.0	14.0	6.6	14.8	6.9	16.4	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
17	LEDE	2.0	0.0	0.0	0.0	3.4	0.0	4.3	9.4	4.6	11.5	5.6	14.5	6.5	15.0	6.9	16.7	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
18	LUPU	3.0	0.0	3.4	0.0	0.0	0.0	4.7	11.5	5.2	12.6	6.0	15.5	6.5	15.8	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
19	MACA	0.0	0.0	0.0	0.0	0.0	0.0	4.6	10.9	4.9	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	MATA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	OPPD	1.0	0.0	1.0	0.0	3.0	9.0	4.3	9.8	4.5	10.3	4.8	12.7	5.0	13.8	5.5	15.2	5.6	15.8	5.9	16.6	6.1	16.9	6.1	16.9
22	ORHY	2.8	0.0	3.7	0.0	4.1	0.0	4.6	10.0	4.8	10.2	5.0	11.7	5.5	14.2	6.1	16.8	6.5	16.9	6.7	17.0	6.9	17.0	6.9	17.0
23	PHHO	3.6	9.1	4.5	11.5	4.9	12.4	5.5	12.9	0.0	0.0	5.7	15.9	5.9	16.3	6.7	16.9	8.0	17.0	7.2	17.0	7.3	17.0	7.3	17.0
24	PLPA	0.0	0.0	0.0	0.0	3.8	9.8	4.3	10.8	4.7	10.1	5.0	11.6	5.8	13.2	6.9	15.9	6.9	16.3	6.9	16.7	6.9	16.9	6.9	16.9
25	POSE	3.5	0.0	3.8	0.0	4.3	0.0	4.6	12.3	5.2	13.1	5.8	14.8	6.4	15.5	6.9	16.7	8.0	17.0	8.0	17.0	7.3	17.0	7.3	17.0
26	SIAL	2.3	0.0	3.0	0.0	3.6	0.0	4.2	10.1	4.5	11.2	5.0	12.8	5.6	14.0	6.4	15.6	6.7	16.0	6.9	16.9	7.1	17.0	7.1	17.0
27	SIFY	3.1	0.0	4.1	0.0	4.6	0.0	4.9	10.1	5.2	11.4	5.4	12.6	5.8	13.6	6.6	15.3	6.8	15.8	7.1	16.8	7.4	17.0	7.4	17.0
28	SPCO	3.8	0.0	4.1	9.0	4.6	9.8	4.8	11.0	5.3	12.8	5.5	14.8	6.1	15.8	6.3	16.5	6.4	16.9	6.5	17.0	0.0	0.0	0.0	0.0
29	STCO	2.8	0.0	3.8	0.0	4.0	0.0	4.6	0.0	4.8	9.4	5.0	9.6	5.5	14.5	6.3	15.8	6.5	16.5	6.7	16.9	6.7	17.0	6.7	17.0
30	TACF	0.0	0.0	0.0	0.0	4.2	10.8	5.2	15.5	5.6	16.0	6.0	16.6	6.6	16.8	6.9	16.9	8.0	17.0	8.0	17.0	7.2	0.0	7.2	0.0
31	TRDU	1.0	0.0	3.8	0.0	0.0	0.0	4.3	9.6	4.6	10.4	5.4	12.8	5.9	14.0	6.4	15.8	6.6	16.7	6.8	16.9	0.0	0.0	0.0	0.0
32	VUCC	0.0	0.0	3.5	0.0	0.0	0.0	5.5	10.9	0.0	0.0	5.8	14.9	6.3	15.4	6.9	16.5	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA FARSON

1980

TYPE SITE ARTR-AGSM

		27 APR	03 MAY	21 MAY	03 JUNE	17 JUNE	01 JULY	15 JULY	29 JULY	13 AUG	30 AUG	21 SEPT											
SPECIES		VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR											

1	AGSM	1.6	0.0	3.2	0.0	4.3	0.0	4.7	0.0	5.5	0.0	5.9	0.0	5.9	11.2	6.2	14.1	6.4	14.9	6.5	0.0	6.7	0.0
2	ALTE	0.0	0.0	0.0	0.0	0.0	0.0	4.1	9.2	5.6	11.4	6.3	14.1	6.9	16.5	6.9	16.6	6.0	16.9	0.0	0.0	0.0	0.0
3	ARFC	2.2	0.0	3.1	0.0	4.2	0.0	4.5	9.0	4.9	10.4	5.4	11.9	6.0	12.8	6.4	14.5	6.5	15.6	6.6	16.9	6.7	17.0
4	ARH02	0.0	0.0	2.9	0.0	4.3	0.0	4.5	10.2	5.5	15.4	6.2	14.5	6.5	16.3	6.9	16.9	6.0	17.0	0.0	0.0	0.0	0.0
5	ARTR	2.9	0.0	3.2	0.0	3.5	0.0	3.6	0.0	3.9	0.0	3.9	9.1	4.1	9.2	4.6	9.7	4.6	9.5	4.6	9.8	5.6	11.0
6	ASKI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	4.8	0.0	5.3	0.0	5.6	0.0	6.0	0.0	0.0	0.0	6.2	0.0
7	ASPU	0.0	0.0	3.2	0.0	3.8	0.0	4.1	10.2	4.7	12.8	5.1	14.2	6.1	16.4	6.4	16.9	6.6	17.0	6.8	17.0	5.9	17.0
8	ASSP	0.0	0.0	2.8	0.0	3.4	0.0	3.9	11.1	4.6	12.8	5.2	14.7	5.8	16.9	6.1	17.0	6.2	17.0	6.3	17.0	6.3	17.0
9	ATCC	2.1	0.0	2.5	0.0	3.4	0.0	4.0	0.0	4.6	10.2	5.1	0.0	5.2	0.0	5.6	0.0	5.8	14.2	5.9	15.4	6.2	16.3
10	CAEL	2.1	0.0	3.1	0.0	4.5	0.0	4.7	9.2	5.5	10.6	5.7	11.6	6.0	14.5	6.4	15.8	6.6	16.1	6.7	16.4	6.8	16.6
11	CELA	2.1	0.0	2.7	0.0	4.1	0.0	4.3	0.0	4.8	10.8	5.0	12.3	5.1	11.4	5.5	13.5	5.7	14.2	6.3	14.6	5.4	15.4
12	CHLE	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	4.9	0.0	5.3	9.7	5.5	11.2	6.1	13.2	6.4	14.8	6.5	15.6	6.9	16.5
13	CHVI	1.9	0.0	2.5	0.0	3.6	0.0	4.1	0.0	4.5	0.0	5.1	1.0	5.4	9.8	5.6	12.8	5.8	13.5	6.3	14.6	6.4	16.6
14	CRFL	0.0	0.0	0.0	0.0	3.6	0.0	3.9	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	DEPI	0.0	0.0	3.2	0.0	4.3	9.8	4.6	11.9	6.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	3.4	0.0	4.4	10.2
16	ERCE	1.0	0.0	2.0	0.0	3.9	0.0	4.1	0.0	4.7	10.5	5.0	12.1	5.6	12.6	6.0	12.9	6.4	14.5	6.8	14.8	6.9	15.7
17	ERCY	2.8	0.0	3.3	0.0	3.3	0.0	3.8	9.1	4.6	10.4	5.3	12.1	6.0	13.8	6.2	16.0	6.4	16.2	6.5	16.6	6.6	16.6
18	GIPU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	15.9	6.9	17.0	8.0	17.0	6.0	17.0	8.0	17.0	0.0	0.0
19	GRSP	2.1	0.0	3.1	0.0	3.5	0.0	4.0	0.0	4.6	10.8	5.0	11.9	5.1	12.8	5.4	14.8	6.0	15.3	6.4	16.2	6.9	16.9
20	HAAC	0.0	0.0	2.4	0.0	3.6	0.0	4.0	9.7	4.9	11.7	5.4	12.5	5.6	16.3	6.1	16.9	6.3	17.0	6.5	17.0	6.6	17.0
21	KOCR	0.0	0.0	2.5	0.0	3.8	0.0	0.0	0.0	4.8	0.0	4.9	11.3	5.5	12.9	6.1	16.3	6.3	16.7	6.9	16.9	8.0	17.0
22	LARE	0.0	0.0	0.0	0.0	2.7	0.0	3.1	0.0	4.8	12.9	6.7	14.5	6.9	16.7	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
23	LEPU	2.0	0.0	2.6	0.0	3.5	0.0	3.9	10.1	4.4	11.4	4.9	14.4	5.4	15.3	6.2	16.1	6.5	16.6	6.7	16.9	6.0	17.0
24	MACA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	10.3	5.9	11.6	6.2	12.6	7.1	16.2
25	OPFR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	0.0	5.4	0.0	5.6	0.0	5.8	0.0	6.1	0.0
26	OPPO	1.0	0.0	1.0	0.0	1.0	0.0	2.1	0.0	4.6	9.3	4.8	11.2	4.9	12.5	5.2	14.0	5.4	14.4	5.9	15.7	6.4	16.5
27	CRHY	1.0	0.0	2.7	0.0	3.5	0.0	3.7	0.0	4.4	9.7	4.9	10.8	5.5	12.8	6.0	15.4	6.2	16.0	6.3	16.9	6.5	17.0
28	PECL	0.0	0.0	0.0	0.0	4.3	0.0	4.6	10.7	5.0	11.8	5.3	14.5	5.4	14.0	5.9	15.9	6.2	16.2	6.3	16.9	6.6	17.0
29	PHHO	2.1	0.0	3.1	0.0	3.8	10.2	4.3	11.8	4.9	13.1	6.3	13.4	6.4	15.5	6.7	16.9	6.8	17.0	6.9	17.0	8.0	17.0
30	POSE	0.0	0.0	3.0	0.0	4.1	0.0	5.2	9.1	6.3	11.1	6.5	15.6	6.5	16.5	6.9	16.9	6.0	17.0	0.0	0.0	0.0	0.0
31	SIHY	0.0	0.0	2.1	0.0	4.5	0.0	5.4	0.0	5.8	10.5	5.9	11.5	5.9	15.1	6.3	16.2	6.6	16.5	6.8	16.9	6.9	17.0
32	SILI	0.0	0.0	3.2	0.0	3.8	0.0	4.3	9.1	4.7	11.5	5.5	13.5	5.9	15.7	6.4	16.9	6.8	17.0	6.9	17.0	8.0	17.0
33	SPCD	0.0	0.0	0.0	0.0	3.2	0.0	3.6	9.1	4.5	10.1	5.0	11.8	5.8	14.5	6.2	15.9	6.4	16.4	6.5	16.7	6.7	16.9
34	STCO	1.7	0.0	2.9	0.0	3.4	0.0	4.5	0.0	5.2	9.2	5.6	11.6	5.7	14.2	6.2	16.9	6.4	17.0	6.5	17.0	6.7	17.0
35	TESP	1.8	0.0	2.7	0.0	3.5	0.0	4.1	0.0	4.8	0.0	5.0	10.6	5.8	13.6	6.4	15.2	6.6	15.6	6.7	0.0	6.8	16.3
36	XASA	0.0	0.0	2.5	0.0	3.7	0.0	4.1	0.0	4.6	0.0	4.9	9.8	5.0	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA HORSE CK

1980

TYPE SITE ARNO-AGSP

		12 APR		26 APR		04 MAY		25 MAY		05 JUNE		20 JUNE		03 JULY		17 JULY		30 JULY		29 AUG		20 SEPT	
SPECIES		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR

1	AGGL	3.2	0.0	0.0	0.0	0.0	0.0	5.4	10.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	AGSP	4.4	0.0	4.5	0.0	5.2	0.0	5.3	0.0	5.7	0.0	6.0	0.0	6.1	0.0	6.2	0.0	6.5	0.0	7.3	0.0	7.7	0.0
3	ANDI	3.0	0.0	0.0	0.0	4.1	9.8	4.7	0.0	5.2	14.7	0.0	0.0	5.4	0.0	6.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
4	ARFE	2.5	0.0	3.0	0.0	4.1	0.0	4.7	9.8	4.9	10.7	5.4	11.1	5.6	13.1	5.7	14.1	5.9	14.6	6.7	15.8	7.2	16.1
5	ARHOZ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	11.5	5.2	0.0	0.0	0.0	6.8	16.5	6.0	17.0	8.0	17.0	7.3	17.0
6	ARNO	2.3	0.0	2.8	0.0	2.8	0.0	3.6	0.0	3.7	0.0	3.9	9.1	0.0	0.0	4.1	9.4	4.7	9.7	5.4	10.1	5.7	11.7
7	ARTR	2.4	0.0	2.9	0.0	2.9	0.0	3.6	0.0	3.6	9.0	4.1	9.2	4.1	9.6	5.5	9.7	4.8	9.7	5.5	10.0	5.6	11.7
8	ASPU	3.1	0.0	3.5	9.1	3.9	9.6	4.4	0.0	5.5	0.0	5.7	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	AST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	9.1	4.9	13.1	5.3	16.9	5.5	16.9	0.0	0.0	8.0	17.0
10	BKTE	3.1	0.0	3.5	0.0	4.3	0.0	4.8	9.8	5.3	10.9	5.6	14.5	6.2	15.7	8.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
11	CAAN	3.2	9.0	3.8	10.1	4.5	10.2	4.7	11.5	5.0	11.9	5.2	12.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	CANU	3.3	0.0	3.7	0.0	3.9	0.0	0.0	0.0	4.8	11.2	5.4	12.6	0.0	0.0	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
13	CELA	3.1	0.0	2.5	0.0	3.8	0.0	4.4	0.0	4.6	9.6	4.9	0.0	5.0	0.0	6.3	10.8	6.0	12.0	6.3	13.1	6.5	0.0
14	CHDE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	9.3	4.3	9.8	4.7	12.4	5.5	12.5	5.7	13.8	6.6	15.8	6.3	14.8
15	CIR	3.1	0.0	3.5	0.0	3.8	0.0	3.9	0.0	4.5	9.5	4.3	0.0	4.6	0.0	5.8	10.2	6.0	13.6	6.9	16.4	7.3	17.0
16	COPA	3.0	0.0	3.7	0.0	4.0	0.0	4.5	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	CRAC	3.2	0.0	3.6	0.0	3.9	0.0	4.0	0.0	4.5	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	CRBR	3.1	0.0	4.4	0.0	4.5	9.6	4.7	11.4	5.0	11.7	5.4	12.8	5.6	14.2	5.8	16.5	5.8	16.9	5.9	17.0	7.2	17.0
19	CYMO	0.0	0.0	4.2	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	DEFI	1.0	0.0	1.0	0.0	0.0	0.0	3.7	10.5	4.2	11.2	4.6	12.1	5.3	13.8	8.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0
21	ERCE	1.0	0.0	1.0	0.0	1.0	0.0	2.8	0.0	3.3	0.0	3.8	0.0	4.7	9.3	5.0	10.5	5.4	11.8	5.8	14.7	5.9	15.8
22	GACO	1.0	0.0	3.7	0.0	4.0	9.1	4.6	10.5	4.9	11.3	5.2	11.8	5.4	12.2	5.6	12.5	6.1	0.0	6.6	0.0	7.1	0.0
23	HAAC	3.1	9.3	3.8	0.0	4.3	9.7	4.5	12.0	5.4	16.5	5.6	16.9	5.8	17.0	5.9	17.0	5.9	17.0	6.4	17.0	6.6	17.0
24	LAFE	1.0	0.0	0.0	0.0	3.5	9.1	3.7	10.5	4.3	12.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	LIFU	0.0	0.0	0.0	0.0	4.2	10.2	4.8	9.8	5.1	10.0	0.0	0.0	4.3	0.0	5.9	15.1	5.8	15.5	6.7	16.6	7.2	17.0
26	LOCR	3.4	9.4	4.0	10.1	4.4	12.4	5.8	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	MACA	1.0	0.0	1.0	0.0	0.0	0.0	3.8	9.4	4.2	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	OPPO	1.0	0.0	1.0	0.0	3.0	9.2	4.0	9.5	4.4	10.4	4.7	12.0	5.2	14.8	5.5	14.9	5.7	15.4	5.9	16.9	6.2	17.0
29	ORFY	3.4	0.0	4.2	0.0	4.5	0.0	4.7	9.1	4.9	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	PECL	3.2	0.0	3.8	0.0	4.3	0.0	4.3	0.0	4.5	9.0	4.9	11.0	5.0	16.1	5.8	16.2	6.4	16.8	6.9	16.9	7.3	17.0
31	PHHO	3.2	9.4	3.8	10.9	4.4	11.3	4.9	12.9	5.3	14.5	5.5	15.7	5.8	15.8	5.9	16.3	6.4	16.8	6.8	16.9	7.3	17.0
32	POSE	4.0	0.0	4.1	0.0	4.3	0.0	4.5	0.0	4.7	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	7.3	0.0
33	RHTR	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	5.3	0.0	5.8	0.0	5.9	0.0	5.5	0.0	6.3	0.0	6.4	0.0
34	SAIB	1.0	0.0	1.0	0.0	1.0	0.0	3.2	0.0	3.5	0.0	3.8	0.0	4.3	0.0	4.9	9.5	0.0	0.0	5.5	14.3	5.1	12.1
35	SIAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	SPCO	3.4	0.0	3.6	0.0	3.9	9.0	4.4	10.3	4.8	11.0	5.2	0.0	5.4	0.0	5.7	0.0	6.0	0.0	6.9	0.0	6.1	0.0
37	STCC	3.8	0.0	3.6	0.0	4.0	0.0	4.7	0.0	4.9	0.0	0.0	0.0	0.0	0.0	5.7	16.5	0.0	0.0	7.2	0.0	7.4	0.0
38	TOIN	0.0	0.0	0.0	0.0	0.0	0.0	5.0	15.1	5.4	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	TRED	1.0	0.0	3.3	0.0	3.5	0.0	4.4	10.3	0.0	0.0	0.0	0.0	4.6	9.8	0.0	0.0	5.5	16.7	6.5	16.9	0.0	0.0
40	TADF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	15.5	5.8	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	VINU	0.0	0.0	4.0	10.1	4.6	11.8	5.3	15.5	5.5	15.8	0.0	0.0	0.0	0.0	6.7	16.9	6.8	17.0	6.9	17.0	0.0	0.0
42	XASA	2.0	0.0	3.9	0.0	4.0	0.0	4.4	0.0	4.6	0.0	4.8	0.0	5.1	9.0	5.8	9.6	6.1	10.4	6.3	12.3	6.4	12.5
43	YUEL	3.2	0.0	3.8	0.0	4.0	0.0	4.4	9.3	4.6	9.7	4.9	0.0	5.3	0.0	5.8	16.9	6.3	0.0	6.9	0.0	7.2	0.0
44	ZIVE	3.3	0.0	3.8	0.0	4.0	0.0	4.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA HORSE CK

1980

TYPE SITE ARTR-AGSM

		12 APR	26 APR	04 MAY	25 MAY	05 JUNE	20 JUNE	03 JULY	17 JULY	30 JULY	29 AUG	20 SEPT
SPECIES	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1 AGSM	3.4 0.0	4.0 0.0	4.4 0.0	4.5 0.0	5.2 0.0	5.3 0.0	5.8 0.0	6.1 0.0	6.4 0.0	7.3 0.0	7.7 0.0	0.0
2 AGSP	4.4 0.0	4.5 0.0	4.9 0.0	5.3 0.0	5.7 0.0	6.0 0.0	6.1 0.0	6.2 0.0	6.5 0.0	7.4 0.0	7.7 0.0	0.0
3 ALTE	3.2 0.0	4.2 0.0	4.4 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
4 ANDI	3.0 0.0	3.0 0.0	4.1 9.8	4.7 0.0	5.2 14.7	0.0 0.0	5.4 0.0	6.0 16.9	0.0 0.0	0.0 0.0	0.0 0.0	0.0
5 ARTR	2.4 0.0	2.9 0.0	2.9 0.0	3.6 0.0	3.6 9.0	4.1 9.2	4.1 9.5	4.7 9.6	4.8 9.7	5.4 10.0	5.6 11.7	
6 BRTE	3.1 0.0	3.5 0.0	4.3 0.0	4.8 9.8	5.2 11.3	5.7 14.5	6.9 16.9	8.0 17.0	8.0 17.0	8.0 17.0	7.1 17.0	
7 CAAN	3.2 9.0	3.8 9.6	4.2 10.0	4.7 12.2	5.0 11.9	5.2 12.8	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
8 CANU	3.3 0.0	3.5 0.0	3.9 0.0	4.1 9.3	4.6 10.5	5.4 12.8	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
9 CELA	3.1 0.0	3.5 0.0	3.8 0.0	4.2 0.0	4.8 9.6	4.9 0.0	5.0 0.0	5.8 10.8	5.9 0.0	5.7 0.0	6.5 0.0	0.0
10 CHDE	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	4.7 9.8	5.1 9.9	5.2 13.3	5.4 13.8	5.6 15.0	6.3 16.8	6.4 14.8	
11 COPA	3.0 0.0	3.7 0.0	4.0 0.0	4.5 0.0	4.6 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
12 CRAC	3.2 0.0	4.1 0.0	4.2 0.0	4.2 0.0	4.2 0.0	4.5 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
13 DEPI	1.0 0.0	1.0 0.0	1.0 0.0	3.4 10.1	4.5 11.1	4.7 11.6	5.1 12.8	6.2 16.9	8.0 17.0	0.0 0.0	0.0 0.0	0.0
14 ERCE	1.0 0.0	1.0 0.0	1.0 0.0	2.8 0.0	3.3 0.0	3.8 0.0	4.7 9.3	5.5 0.0	5.7 0.0	6.5 0.0	5.9 15.8	
15 ERPL	3.2 0.0	4.2 9.0	4.4 9.1	4.9 10.4	5.2 0.0	5.4 9.5	5.7 12.5	6.2 16.9	8.0 17.0	8.0 17.0	7.4 11.4	
16 LAFE	2.7 0.0	0.0 0.0	3.5 9.1	3.7 10.5	4.3 12.1	4.5 12.6	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
17 LOCR	3.4 9.3	4.2 10.1	4.4 12.4	5.8 14.8	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
18 MACA	0.0 0.0	0.0 0.0	0.0 0.0	3.6 9.4	4.3 10.1	0.0 0.0	0.0 0.0	5.5 11.8	0.0 0.0	6.8 0.0	6.4 11.8	
19 MAER	0.0 0.0	0.0 0.0	0.0 0.0	3.8 10.5	4.1 9.2	0.0 0.0	4.8 13.1	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
20 CPPD	1.0 0.0	1.0 0.0	3.5 9.2	4.1 9.6	4.6 10.5	4.9 13.1	5.2 14.8	5.4 15.3	5.5 15.6	5.9 16.9	6.2 17.0	
21 GRFY	3.4 0.0	0.0 0.0	4.1 0.0	4.7 9.1	4.9 10.3	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
22 PECL	3.2 0.0	4.4 0.0	4.4 0.0	4.4 0.0	4.5 9.0	4.7 9.4	4.9 0.0	5.8 16.2	6.4 16.8	6.9 16.9	7.3 17.0	
23 PHHC	3.1 9.4	4.0 10.1	4.3 10.3	4.9 12.9	5.5 14.9	5.7 15.4	5.8 15.7	6.5 16.5	6.7 16.9	0.0 0.0	7.3 17.0	
24 POSE	3.8 0.0	4.1 0.0	4.2 0.0	4.5 0.0	4.9 0.0	5.1 0.0	6.5 0.0	8.0 0.0	0.0 0.0	0.0 0.0	7.3 0.0	0.0
25 SAKA	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	4.8 11.2	
26 SPCD	3.0 0.0	0.0 0.0	3.8 0.0	4.0 0.0	4.5 0.0	4.8 0.0	5.4 0.0	5.7 0.0	6.0 0.0	0.0 0.0	6.9 0.0	0.0
27 STCD	3.4 0.0	0.0 0.0	3.9 0.0	4.7 0.0	4.9 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	7.2 0.0	7.3 0.0	0.0
28 VINU	0.0 0.0	4.2 10.1	4.6 11.8	5.3 15.5	5.5 15.8	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0
29 XASA	2.0 0.0	0.0 0.0	3.4 0.0	4.3 0.0	4.8 0.0	4.9 0.0	5.1 9.0	6.0 9.6	6.1 10.4	6.3 12.1	6.4 12.5	
30 ZIVE	3.3 0.0	0.0 0.0	4.0 0.0	4.0 0.0	4.4 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA MESA ANTEL

1960

TYPE SITE ARTR-AGSM

SPECIES	26 APR		03 MAY		21 MAY		03 JUNE		17 JUNE		01 JULY		15 JULY		29 JULY		12 AUG		31 AUG		21 SEPT	
	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
1 AGSM	2.1	0.0	3.5	0.0	4.4	0.0	4.5	0.0	4.8	0.0	5.5	0.0	5.7	0.0	6.2	0.0	6.5	0.0	6.8	0.0	6.9	0.0
2 ALTE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	11.3	6.2	14.5	6.8	15.7	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
3 ANDI	0.0	0.0	0.0	0.0	3.5	9.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	12.5	6.5	16.9	0.0	0.0	0.0	0.0	6.7	17.0
4 ARHC2	0.0	0.0	3.7	0.0	0.0	0.0	4.3	9.1	4.6	11.2	6.1	13.9	6.5	14.8	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
5 ARTR	3.1	0.0	3.4	0.0	3.4	0.0	4.1	0.0	3.8	0.0	4.2	9.5	4.1	9.7	4.5	9.8	4.6	10.1	4.6	10.0	5.6	11.2
6 ASGI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 ASSP	1.0	0.0	3.3	0.0	0.0	0.0	4.5	11.0	4.8	11.4	5.3	12.9	5.5	15.5	6.3	16.9	6.5	17.0	6.7	17.0	6.8	17.0
8 ATGA	0.0	0.0	3.2	0.0	3.8	0.0	4.2	0.0	4.4	0.0	4.8	9.6	5.4	0.0	5.8	0.0	5.9	0.0	6.0	0.0	6.1	0.0
9 CAEL	2.4	0.0	3.2	0.0	4.5	0.0	4.7	0.0	4.9	0.0	5.4	0.0	5.5	0.0	5.9	0.0	6.3	0.0	6.6	0.0	6.7	0.0
10 CELA	3.1	0.0	3.4	0.0	4.1	9.0	4.3	9.1	4.5	9.2	5.8	11.2	6.3	11.5	6.3	13.4	6.4	14.5	6.4	14.9	6.5	16.0
11 CHE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	10.0	4.6	10.4	5.3	11.1	5.8	15.4	6.1	15.7	6.5	16.1	6.7	16.7
12 CHVI	3.1	0.0	3.5	0.0	3.9	0.0	4.2	0.0	4.5	0.0	4.6	9.6	5.0	10.1	5.3	12.2	6.1	12.5	6.4	14.3	6.8	16.5
13 CORA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	9.2	5.1	13.9	6.7	15.5	6.9	16.9	8.0	17.0
14 CYMO	0.0	0.0	3.3	0.0	4.7	11.4	0.0	0.0	5.4	14.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15 DEPI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	12.8	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
16 ERCA	3.6	0.0	3.7	0.0	4.6	9.6	4.8	10.4	5.2	11.4	5.6	12.7	5.7	14.8	6.1	16.2	6.3	16.9	6.5	17.0	6.9	17.0
17 ERCA2	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	11.9	0.0	0.0	0.0	0.0	0.0	0.0	6.7	16.9
18 ERCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	9.0	4.2	12.2	5.8	12.9	5.9	13.0	6.5	14.5	6.9	15.9	0.0	0.0
19 ERGV	3.2	0.0	3.6	0.0	4.7	9.1	4.9	0.0	5.1	10.6	5.9	11.9	5.1	14.7	6.2	16.3	0.0	0.0	0.0	0.0	0.0	0.0
20 GIFU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	11.2	6.2	13.3	6.6	14.7	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
21 HAAC	2.8	0.0	3.3	0.0	4.0	9.3	4.4	9.4	4.7	11.2	5.3	14.1	6.2	15.7	6.3	16.8	6.5	16.9	6.7	17.0	6.8	17.0
22 LARE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	11.9	5.4	12.5	6.9	15.8	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
23 LEPU	3.2	0.0	3.5	0.0	4.2	0.0	4.4	0.0	4.6	9.4	5.1	11.2	5.3	12.9	6.3	15.5	6.5	16.5	6.8	16.9	6.9	17.0
24 LOEM	1.0	0.0	0.0	0.0	0.0	0.0	4.3	9.1	0.0	0.0	5.7	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 MACA	3.1	0.0	3.3	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	10.3	5.4	12.1	5.6	12.3	6.7	14.3	6.9	16.9
26 OPPO	1.0	0.0	1.0	0.0	3.0	9.0	3.1	9.1	4.2	9.2	4.6	10.2	4.7	11.2	5.1	0.0	5.5	14.9	5.7	15.5	5.9	16.5
27 ORHY	2.4	0.0	3.2	0.0	3.8	0.0	3.9	0.0	4.6	9.5	5.2	10.6	5.3	11.9	6.2	16.3	6.4	16.9	6.7	17.0	6.8	17.0
28 PELA	3.7	0.0	3.9	0.0	4.1	0.0	4.6	0.0	0.0	0.0	5.1	11.5	5.8	13.1	5.9	14.5	6.0	14.9	6.0	16.2	6.1	16.9
29 PHHO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	5.0	11.0	3.0	0.0	3.6	0.0	4.7	11.8	4.8	12.1	5.3	12.9
30 POFE	6.3	15.5	6.8	16.9	6.9	17.0	8.0	17.0	8.0	17.0	0.0	0.0	3.2	0.0	3.3	0.0	4.4	0.0	4.7	0.0	4.9	10.8
31 POSE	6.2	14.7	6.3	16.9	6.9	17.0	8.0	17.0	8.0	17.0	0.0	0.0	2.6	0.0	3.4	0.0	4.3	9.0	5.2	9.7	5.7	10.9
32 SIHY	6.5	14.8	6.9	16.6	6.9	16.9	8.0	17.0	8.0	17.0	0.0	0.0	2.3	0.0	3.2	0.0	4.0	0.0	4.2	0.0	4.8	9.5
33 SILI	5.6	12.2	6.1	16.2	6.4	16.5	6.9	16.7	6.9	16.8	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	4.2	9.5	4.8	11.3
34 STCO	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	16.9	0.0	0.0	2.1	0.0	3.2	0.0	3.7	0.0	0.0	0.0	4.8	0.0
35 TREY	5.4	13.2	6.0	16.3	6.3	16.9	6.5	17.0	6.6	17.0	0.0	0.0	0.0	0.0	3.4	0.0	4.0	0.0	4.5	10.4	4.8	11.6
36 TREY	6.2	0.0	6.9	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA OWL DRAW

1963

TYPE SITE ARND-AGSP-ARTP-AESP

		25 APRIL	04 MAY	25 MAY	02 JUNE	18 JUNE	30 JUNE	13 JULY	28 JULY	26 AUG	05 SEPT	21 SEPT
SPECIES	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR	VEG REPR
1 ACMI	0.0	0.0	0.0	0.0	3.8	0.0	4.0	0.0	4.5	0.0	5.2	0.0
2 AGGL	0.0	0.0	0.0	0.0	4.0	9.0	4.3	9.2	6.2	14.5	0.0	0.0
3 AGSM	4.2	0.0	4.3	0.0	4.9	0.0	4.8	0.0	5.3	9.8	4.4	12.8
4 AGSP	4.3	0.0	4.7	0.0	5.2	0.0	5.6	9.3	5.3	10.4	5.5	12.3
5 ALTE	4.0	0.0	4.4	0.0	4.7	9.8	4.8	10.2	5.4	12.5	6.3	15.0
6 ALL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 ARFC	0.0	0.0	0.0	0.0	4.1	9.0	4.4	9.3	4.9	11.3	5.8	14.0
8 ARND	0.0	0.0	4.5	0.0	0.0	0.0	5.3	12.8	0.0	0.0	6.1	15.4
9 ARND	2.4	0.0	3.6	0.0	3.7	0.0	3.6	0.0	3.8	0.0	4.4	9.3
10 ARTP	2.6	0.0	3.6	0.0	3.8	0.0	3.7	0.0	3.9	0.0	4.2	9.2
11 ASDR	0.0	0.0	0.0	0.0	0.0	0.0	4.4	9.2	5.6	14.5	5.6	14.5
12 ASMI2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13 ASPU	0.0	0.0	3.9	10.4	4.5	11.8	4.8	13.2	5.4	14.4	5.7	15.3
14 ASPI	0.0	0.0	0.0	0.0	4.3	11.2	4.6	11.7	5.4	14.2	6.5	15.8
15 ASSP	0.0	0.0	0.0	0.0	4.4	11.3	4.6	11.6	5.4	13.8	5.8	14.6
16 ASST	0.0	0.0	3.1	0.0	4.0	9.2	4.9	12.8	5.4	14.5	6.1	15.8
17 BASA	0.0	0.0	4.5	9.3	4.7	10.8	4.9	11.6	5.4	14.2	6.2	15.7
18 CACH	3.3	0.0	3.7	9.1	4.4	10.2	4.6	11.2	5.4	13.3	5.8	14.1
19 CANL	0.0	0.0	3.8	0.0	4.3	0.0	4.6	9.8	4.8	10.7	5.7	11.5
20 CELA	3.5	0.0	4.0	0.0	4.5	0.0	4.7	0.0	4.9	10.0	5.0	10.8
21 CHGO	3.8	0.0	4.2	0.0	0.0	0.0	4.6	9.1	4.9	11.2	5.3	12.0
22 CIL	0.0	0.0	3.2	0.0	4.0	9.0	4.3	9.3	4.8	10.8	5.8	12.9
23 CRAC	3.6	0.0	4.0	0.0	4.5	9.7	4.7	11.1	5.5	12.8	6.4	13.2
24 CRBR	0.0	0.0	3.2	0.0	4.0	9.0	4.6	11.2	5.0	11.6	5.8	13.0
25 CYMD	4.0	10.5	4.8	12.2	5.2	14.5	0.0	0.0	5.9	15.0	6.9	16.9
26 DEPI	0.0	0.0	0.0	0.0	3.6	10.8	4.3	11.3	5.1	13.3	6.3	14.1
27 DUCO	0.0	0.0	3.8	11.3	5.1	13.2	5.8	14.5	6.3	15.4	6.6	15.9
28 ERAS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 ERDC	3.8	10.8	4.3	11.1	4.8	11.7	4.9	11.9	5.4	12.8	5.8	15.0
30 FRAT	0.0	0.0	0.0	0.0	4.7	11.3	4.9	11.7	5.6	13.5	6.1	14.4
31 GICQ	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	4.5	11.4	5.6	12.7
32 GRSD	0.0	0.0	0.0	0.0	3.9	0.0	4.1	0.0	4.3	0.0	4.6	9.0
33 HAAC	3.5	0.0	3.8	9.0	4.4	9.7	4.7	11.5	5.2	14.3	5.4	15.5
34 JUOS	0.0	0.0	1.0	0.0	4.0	0.0	4.1	0.0	4.4	0.0	4.5	0.0
35 KDCR	3.2	0.0	4.2	0.0	0.0	0.0	4.9	10.4	5.4	11.6	5.7	12.4
36 LAPE	0.0	0.0	0.0	0.0	3.8	10.5	4.1	11.2	0.0	0.0	0.0	0.0
37 LERE	3.7	0.0	4.3	0.0	4.6	9.0	4.8	9.5	6.5	12.0	6.6	13.8
38 LES	0.0	0.0	0.0	0.0	3.5	10.5	0.0	0.0	0.0	0.0	0.0	0.0
39 LILE	0.0	0.0	0.0	0.0	4.5	9.2	4.9	10.0	5.3	12.8	6.0	14.5
40 LYER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	10.2	5.3	13.1
41 MAGR	3.5	0.0	3.7	0.0	4.4	0.0	4.7	9.0	5.0	9.3	5.3	10.0
42 MELO	0.0	0.0	4.1	10.9	4.8	14.0	0.0	0.0	0.0	0.0	0.0	0.0
43 OPPO	0.0	0.0	1.0	0.0	1.0	0.0	3.0	9.0	4.2	0.0	4.5	11.7
44 ORFA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	10.8	4.6	11.3
45 CRFY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	10.3	5.8	13.4
46 OXLA	0.0	0.0	3.4	9.0	4.3	11.3	4.9	12.8	5.3	14.0	5.8	14.4
47 PECL	0.0	0.0	3.5	0.0	4.3	9.7	4.8	11.3	5.3	13.8	5.5	14.9
48 PELA	0.0	0.0	0.0	0.0	0.0	0.0	4.7	10.2	5.3	12.8	5.6	14.0
49 PHHC	0.0	0.0	4.1	11.3	4.8	12.6	0.0	0.0	5.5	14.2	5.9	15.5
50 PHML	0.0	0.0	0.0	0.0	4.0	11.5	4.8	11.8	5.4	13.8	5.6	15.0
51 POFE	0.0	0.0	4.3	9.5	4.8	11.5	4.9	12.0	5.4	12.8	6.0	15.5
52 POSE	0.0	0.0	3.8	0.0	4.6	10.4	4.9	11.6	5.5	13.1	6.0	15.6
53 SECA	0.0	0.0	0.0	0.0	4.1	10.3	4.8	11.6	5.8	13.0	6.3	14.1
54 SELA	0.0	0.0	0.0	0.0	4.1	9.0	4.3	9.4	4.6	11.6	5.3	12.4
55 SPCO	0.0	0.0	0.0	0.0	3.4	0.0	3.9	0.0	4.3	0.0	4.9	13.5
56 STCO	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	4.8	10.7	5.3	13.3
57 STVI	0.0	0.0	0.0	0.0	4.7	0.0	4.9	0.0	5.5	13.2	5.9	15.6
58 TADF	0.0	0.0	0.0	0.0	0.0	0.0	4.2	10.0	5.0	15.8	6.5	15.8
59 TRDU	0.0	0.0	0.0	0.0	3.7	0.0	4.3	0.0	4.6	9.4	5.3	12.0
60 TREY	0.0	0.0	3.8	0.0	4.4	10.9	4.9	11.8	5.3	13.9	5.6	15.3
61 VIAN	0.0	0.0	0.0	0.0	3.8	9.0	4.4	10.8	5.2	0.0	6.2	0.0
62 XASA	3.4	0.0	3.7	0.0	4.3	0.0	4.5	0.0	4.8	0.0	5.6	9.5
63 ZIVE	0.0	0.0	3.9	0.0	4.1	0.0	4.4	9.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA RED WASH 2

1980

TYPE SITE ARTR-AGSM-AGSP

		27 APR		02 MAY		26 MAY		02 JUNE		16 JUNE		30 JUNE		14 JULY		28 JULY		11 AUG		30 AUG		19 SEPT	
SPECIES		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR

1	AGSM	3.0	0.0	3.6	0.0	4.6	0.0	4.5	0.0	5.3	0.0	5.5	0.0	5.9	12.5	6.1	15.6	6.5	15.9	6.5	0.0	6.8	0.0
2	AGSP	3.4	0.0	4.4	0.0	4.5	0.0	5.2	0.0	5.8	10.1	5.9	11.5	5.9	14.7	5.9	16.3	6.2	16.4	6.4	16.5	0.0	0.0
3	ALTE	0.0	0.0	0.0	0.0	4.3	9.6	4.7	9.8	6.2	13.6	0.0	0.0	6.4	15.1	0.0	0.0	6.0	16.9	0.0	0.0	0.0	0.0
4	ARHO	3.0	0.0	3.2	0.0	4.2	9.7	4.5	0.0	5.6	10.1	5.8	11.7	5.8	11.7	5.8	12.8	6.9	16.5	6.9	16.8	6.9	16.9
5	ARHO2	3.4	0.0	3.8	0.0	4.6	10.5	4.7	11.8	6.1	14.7	6.4	14.7	6.6	15.4	6.9	15.8	6.9	16.8	6.9	16.9	8.0	17.0
6	ARTR	3.1	0.0	3.4	0.0	3.5	0.0	3.8	0.0	4.0	0.0	4.2	9.1	4.3	9.3	4.5	9.6	4.6	9.8	4.7	10.0	5.3	10.2
7	ASDI	3.4	0.0	0.0	0.0	4.2	0.0	4.3	0.0	4.7	9.2	5.3	11.5	5.5	13.2	5.9	16.1	6.2	16.5	6.3	16.9	6.7	17.0
8	ASKE	1.0	0.0	2.8	0.0	4.2	0.0	4.3	0.0	4.8	0.0	0.0	0.0	5.4	11.3	6.1	13.1	6.3	13.7	6.5	14.5	6.7	16.2
9	ASPU	3.4	0.0	0.0	0.0	4.5	11.6	4.8	11.9	5.7	13.9	5.9	14.4	6.1	15.5	6.2	16.9	6.5	17.0	6.9	17.0	8.0	17.0
10	CELA	3.2	0.0	3.6	0.0	4.1	0.0	4.5	0.0	4.8	9.9	0.0	0.0	5.2	10.3	5.8	12.7	6.1	13.5	6.3	14.6	6.4	14.9
11	CHDO	3.6	0.0	3.9	0.0	4.4	9.1	4.9	9.3	5.3	10.4	5.6	11.6	5.8	14.1	6.2	16.5	6.3	16.7	6.4	16.9	6.5	17.0
12	CHNA	1.0	0.0	2.3	0.0	3.5	0.0	3.8	0.0	4.5	0.0	5.1	9.6	5.3	9.7	5.6	9.7	5.8	10.5	6.0	12.7	6.2	14.5
13	CHVI	3.6	0.0	4.0	0.0	4.5	0.0	4.7	0.0	4.8	0.0	4.9	9.1	5.0	9.4	5.6	9.9	5.8	10.9	6.2	12.9	6.3	13.8
14	CGRA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	11.8	5.7	12.0	6.1	13.5	6.7	14.6	6.9	16.8
15	CRFL	0.0	0.0	3.5	0.0	4.7	9.8	4.8	9.9	5.0	10.3	5.8	11.7	5.9	12.9	6.5	15.5	6.6	16.0	6.9	16.9	7.0	17.0
16	CYMO	3.2	0.0	3.4	0.0	4.1	11.7	4.7	11.9	5.3	14.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	ERAS	0.0	0.0	0.0	0.0	4.8	11.3	5.1	12.4	5.8	13.1	6.2	13.8	6.3	14.3	0.0	0.0	8.0	16.9	0.0	0.0	0.0	0.0
18	ERBR	1.0	0.0	1.0	0.0	3.8	0.0	4.4	0.0	4.8	9.8	5.3	11.4	5.4	11.7	5.8	12.1	6.2	12.4	6.3	12.6	6.5	13.9
19	ERCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	11.2	0.0	0.0	6.2	13.8	0.0	0.0	0.0	0.0
20	ERGV	3.7	0.0	3.9	0.0	4.2	9.5	4.6	9.8	5.2	11.2	5.7	11.9	5.8	13.3	6.3	15.3	6.5	15.9	6.6	16.5	6.7	16.8
21	GICO	0.0	0.0	0.0	0.0	4.7	9.2	4.8	9.4	5.5	11.4	0.0	0.0	5.8	12.3	0.0	0.0	6.3	13.2	6.8	16.5	7.0	17.0
22	GRSP	3.1	0.0	3.4	0.0	4.2	0.0	4.5	0.0	4.7	0.0	0.0	0.0	5.1	0.0	5.6	0.0	6.2	0.0	6.6	0.0	6.8	0.0
23	HAAC	2.5	0.0	3.4	0.0	4.3	0.0	4.6	9.3	5.6	11.6	0.0	0.0	5.8	15.7	6.1	16.9	6.2	17.0	6.4	17.0	6.5	17.0
24	KOCR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	12.3	0.0	0.0	0.0	0.0	6.1	16.9	6.2	16.9
25	LAFE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	12.4	0.0	0.0	6.4	14.5	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
26	LEPU	3.2	0.0	3.6	0.0	4.5	0.0	4.6	10.3	4.8	10.9	5.5	11.4	6.2	14.4	6.3	15.5	6.5	15.8	6.7	16.9	6.8	17.0
27	MACA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.3	5.6	9.9	5.9	11.2	6.1	12.5	6.5	16.0
28	MAGR	3.4	0.0	3.7	0.0	4.2	0.0	4.5	9.2	4.8	10.3	5.1	10.4	5.3	10.6	6.1	11.2	6.3	14.7	6.8	15.2	6.8	16.5
29	GPFO	1.0	0.0	1.0	0.0	2.5	0.0	2.7	9.1	4.2	9.6	4.5	11.1	4.9	13.2	5.4	14.3	5.6	14.8	5.8	15.5	5.9	16.3
30	GRFA	2.5	0.0	3.1	0.0	4.6	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	ORHY	2.5	0.0	3.3	0.0	4.2	0.0	4.7	0.0	4.9	10.2	5.1	11.6	5.4	12.9	6.0	15.8	6.2	16.1	6.7	16.9	6.8	17.0
32	PECL	3.4	0.0	3.7	0.0	4.6	9.5	4.8	0.0	5.5	11.2	5.7	11.4	5.8	13.2	6.2	14.5	6.4	15.4	6.5	16.9	7.0	17.0
33	PHFO	3.5	0.0	3.9	0.0	4.4	11.3	4.6	11.9	5.3	12.7	5.6	15.0	6.1	16.5	6.6	16.8	6.9	16.9	0.0	0.0	0.0	0.0
34	POSE	3.4	0.0	3.9	0.0	4.8	0.0	5.2	0.0	6.2	10.3	6.4	11.9	6.5	13.0	6.8	15.5	6.9	15.9	6.9	16.9	8.0	17.0
35	SIHY	0.0	0.0	0.0	0.0	4.2	0.0	5.1	0.0	5.5	9.8	0.0	0.0	5.8	12.7	6.1	14.5	6.3	16.0	6.6	16.9	6.8	17.0
36	SILI	0.0	0.0	0.0	0.0	4.7	10.8	4.8	11.4	5.5	12.2	5.8	13.2	6.2	13.8	6.4	16.5	6.5	16.8	6.8	16.9	6.9	17.0
37	STCO	2.7	0.0	3.2	0.0	3.9	0.0	4.5	0.0	4.8	9.8	5.6	11.3	5.8	13.7	5.9	16.2	6.0	16.4	6.4	16.9	6.6	17.0
38	TECA	3.0	0.0	3.2	0.0	3.4	0.0	3.6	0.0	4.5	9.1	4.8	9.4	5.1	10.6	5.4	11.6	5.6	13.0	6.2	14.5	6.5	15.7
39	TOIN	3.4	0.0	3.7	0.0	4.3	0.0	4.4	0.0	9.3	0.0	0.0	0.0	5.7	15.3	6.0	15.8	6.1	16.4	6.2	16.8	0.0	0.0
40	VINU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	12.4	0.0	0.0	6.4	14.5	6.9	16.9	8.0	0.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA SHOS ANT#7

1983

TYPE SITE ARTR-AGSM

21 SEPT		12 APRIL		26 APRIL		02 MAY		23 MAY		05 JUNE		18 JUNE		01 JULY		16 JULY		30 JULY		15 AUG		30 AUG		21 SEP
SPECIES		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR		VEG REPR

1	AGSM	2.8	0.0	4.2	0.0	4.4	0.0	4.8	0.0	5.4	9.2	5.6	11.2	5.4	11.8	5.9	12.7	6.2	15.5	6.5	15.8	6.8	15.9	7.0 16.5
2	ALTE	3.1	0.0	3.5	0.0	3.7	9.4	3.9	11.2	4.2	11.8	5.2	12.9	5.8	14.7	6.4	15.7	6.9	16.9	8.0	17.0	0.0	0.0	0.0
3	ARF02	0.0	0.0	4.2	9.8	0.0	0.0	4.5	12.8	5.3	13.8	6.4	14.8	6.6	15.5	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0
4	ARTR	2.2	0.0	3.2	0.0	3.4	0.0	3.7	0.0	4.2	0.0	4.3	9.2	4.0	9.1	4.2	9.1	4.4	9.4	4.6	9.6	5.2	10.4	5.9 13.0
5	ASMI2	3.0	0.0	3.8	0.0	0.0	0.0	4.6	11.8	4.7	12.6	4.9	13.5	5.3	14.5	5.6	15.3	6.1	16.3	6.3	16.7	7.1	17.0	
6	ASFU	3.1	0.0	3.6	0.0	4.2	10.8	4.5	13.5	4.9	14.3	5.4	15.0	5.6	15.7	6.0	16.1	6.7	16.9	6.9	17.0	8.0	17.0	
7	BCGR	2.8	0.0	3.8	0.0	0.0	0.0	5.3	0.0	5.4	9.1	5.6	10.9	5.7	11.8	6.0	12.9	6.2	13.5	6.5	15.5	5.7	16.9	
8	BRTE	2.1	0.0	3.5	0.0	0.0	0.0	4.5	0.0	5.1	10.4	5.6	14.6	6.3	15.6	6.6	15.9	6.9	16.3	6.9	16.8	8.0	17.0	
9	CAFI	0.0	0.0	3.8	9.0	0.0	0.0	4.8	11.5	5.5	12.0	4.7	0.0	5.9	0.0	6.1	15.0	6.4	15.5	6.7	16.3	6.7	16.5	
10	CELA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	4.6	0.0	4.8	0.0	5.0	0.0	5.5	0.0	5.7	0.0	6.1	0.0	
11	CHAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	10.9	0.0	0.0	6.1	15.8	6.4	16.4	0.0	0.0	
12	CYPO	3.5	0.0	3.8	9.2	0.0	0.0	4.4	11.5	4.8	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13	DEPI	2.2	0.0	0.0	0.0	0.0	0.0	4.9	10.2	5.1	11.1	5.8	13.8	6.4	15.0	6.9	16.4	6.9	16.5	6.9	16.9	8.0	17.0	
14	ERFU	3.1	0.0	3.9	0.0	0.0	0.0	4.8	10.3	4.9	11.2	5.5	12.2	5.7	13.8	5.8	15.0	6.3	16.9	6.4	17.0	6.5	17.0	
15	EIPU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	11.8	5.1	13.2	5.8	15.0	6.8	16.7	6.9	16.9	8.0	17.0	0.0	0.0	
16	LARE	2.5	0.0	0.0	0.0	0.0	0.0	4.6	11.4	4.9	11.5	5.6	12.8	6.2	14.3	6.8	16.0	6.9	16.7	6.9	16.8	8.0	17.0	
17	LEDF	1.0	0.0	0.0	0.0	0.0	0.0	4.8	10.9	5.1	13.1	0.0	0.0	5.8	14.9	6.9	16.3	6.9	16.9	8.0	17.0	0.0	0.0	
18	LUPU	2.8	0.0	3.3	0.0	0.0	0.0	4.1	0.0	4.3	10.4	5.0	12.8	5.4	13.7	6.4	15.8	6.9	16.9	8.0	17.0	7.4	17.0	
19	MACA	0.0	0.0	0.0	0.0	0.0	0.0	4.7	9.9	5.1	10.6	0.0	0.0	5.5	12.4	6.5	14.0	6.6	15.5	6.8	16.7	8.0	17.0	
20	GPPD	1.0	0.0	1.0	0.0	0.0	0.0	3.5	0.0	4.2	9.6	4.2	10.7	4.6	13.3	5.0	14.7	5.4	15.9	5.7	16.7	5.9	16.9	
21	ORHY	2.2	0.0	3.2	0.0	0.0	0.0	4.8	9.3	5.1	9.9	5.4	13.6	5.6	14.0	5.9	15.0	6.3	16.5	6.5	16.9	6.6	17.0	
22	PHFC	2.9	0.0	3.7	10.6	4.2	11.5	4.8	12.5	4.9	14.2	5.6	14.9	5.7	15.6	5.9	16.5	6.9	16.9	8.0	17.0	8.0	17.0	
23	PLPA	1.0	0.0	1.0	0.0	0.0	0.0	4.3	9.7	4.5	10.4	4.6	11.7	5.3	12.6	5.9	13.3	6.7	15.5	6.8	15.5	0.0	0.0	
24	POSE	3.2	0.0	4.1	0.0	0.0	0.0	5.4	10.5	5.6	11.4	6.1	13.1	6.5	14.8	6.7	15.4	6.9	16.0	6.9	16.4	8.0	17.0	
25	SIAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	12.1	5.1	13.6	5.9	15.3	0.0	0.0	6.9	16.9	8.0	17.0	0.0	0.0	
26	SIHY	0.0	0.0	4.5	0.0	0.0	0.0	4.6	0.0	5.0	0.0	5.4	10.3	5.6	12.2	6.1	15.3	6.4	16.5	6.6	16.7	6.9	16.8	
27	SPCO	3.0	0.0	3.4	0.0	0.0	0.0	4.6	0.0	4.8	0.0	5.3	0.0	5.5	13.5	5.8	0.0	6.1	0.0	6.3	16.1	6.6	0.0	
28	STCO	2.3	0.0	4.2	0.0	0.0	0.0	4.7	0.0	4.9	9.9	4.6	11.4	4.8	13.8	6.2	15.6	6.4	16.3	6.4	16.4	6.5	16.9	

PHENOLOGICAL INVENTORY

STUDY AREA SWEETWATER

1980

TYPE SITE ARND-ARTR-AGSM

	19 APR		04 MAY		22 MAY		04 JUNE		18 JUNE		02 JULY		16 JULY		30 JULY		14 AUG		29 AUG		20 SEPT	
SPECIES	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR
*****	*****																					
1 AGSM	2.5	0.0	4.2	0.0	4.4	0.0	5.0	0.0	5.2	0.0	5.7	11.5	5.9	0.0	6.3	16.2	6.6	0.0	6.8	16.6	7.1	0.0
2 ALTE	0.0	0.0	3.4	0.0	4.5	9.2	4.8	10.8	5.5	13.4	6.7	15.5	6.8	16.5	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
3 ARFP	0.0	0.0	3.3	0.0	3.9	0.0	4.2	0.0	4.4	0.0	4.8	9.1	4.9	9.4	5.1	9.5	5.4	9.8	5.7	12.1	5.9	13.1
4 ARFO	3.5	0.0	4.0	0.0	4.5	9.1	4.7	9.2	5.3	11.4	5.6	14.3	6.5	15.3	6.7	16.9	6.9	17.0	8.0	17.0	7.3	17.0
5 ARFO2	0.0	0.0	3.7	0.0	4.9	11.9	5.3	14.1	5.6	14.8	6.3	16.1	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
6 ARND	3.1	0.0	3.4	0.0	3.9	0.0	4.1	0.0	3.8	0.0	4.0	9.1	4.2	9.2	4.4	9.7	4.6	9.8	4.9	10.2	5.7	13.5
7 ARTR	2.4	0.0	3.1	0.0	3.3	0.0	3.8	0.0	3.8	0.0	4.0	9.1	4.2	9.3	4.5	9.8	4.7	9.9	5.1	10.5	5.5	13.5
8 ASPI2	0.0	0.0	3.9	0.0	4.7	9.1	4.8	11.2	5.2	11.6	5.8	14.4	6.4	16.7	6.7	16.9	6.8	17.0	8.0	17.0	7.2	17.0
9 ASPU	3.2	0.0	3.9	0.0	4.8	11.4	4.9	0.0	5.3	0.0	6.1	0.0	6.2	0.0	6.5	16.9	6.7	17.0	8.0	17.0	0.0	0.0
10 ASS1	0.0	0.0	0.0	0.0	4.3	9.0	4.5	9.7	4.9	11.9	5.4	13.8	5.7	15.3	6.7	16.5	0.0	0.0	0.0	0.0	6.7	16.9
11 ASSP	0.0	0.0	3.6	0.0	4.5	10.3	4.7	10.4	5.3	11.4	5.6	12.7	6.0	14.5	6.5	15.7	6.6	16.3	6.8	16.9	6.9	17.0
12 CAEL	2.9	0.0	3.5	0.0	4.5	11.6	4.7	11.9	5.3	13.2	6.4	15.4	6.7	16.2	6.8	16.5	6.8	16.7	6.9	16.9	7.1	17.0
13 CAFI	0.0	0.0	3.9	10.1	4.8	11.9	5.1	12.0	5.6	13.6	6.3	15.8	6.4	0.0	6.5	16.5	6.6	16.7	6.8	16.9	7.4	17.0
14 CELA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	6.2	0.0	6.6	0.0	6.7	0.0	7.2	0.0
15 CHDO	0.0	0.0	3.8	0.0	4.2	9.0	4.4	9.8	4.8	11.3	5.2	13.9	5.6	16.3	6.2	16.6	6.5	16.9	7.1	17.0	0.0	0.0
16 CHE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	11.3	5.2	13.1	0.0	0.0	6.1	10.4	0.0	0.0	0.0	0.0	0.0	0.0
17 CHNA	0.0	0.0	3.1	0.0	4.1	0.0	4.3	0.0	4.6	0.0	4.9	0.0	5.0	0.0	5.4	9.2	5.6	9.6	6.0	10.5	6.1	13.1
18 CHVI	2.1	0.0	3.5	0.0	3.9	0.0	4.1	0.0	4.4	0.0	4.8	9.1	5.5	9.7	6.2	10.3	6.5	11.2	6.5	12.6	6.6	15.2
19 COPA	0.0	0.0	0.0	0.0	4.3	9.0	4.7	11.2	5.1	11.5	5.7	13.6	5.8	15.9	6.3	16.9	6.4	17.0	6.8	17.0	6.9	17.0
20 CRBR	0.0	0.0	0.0	0.0	4.5	10.5	4.7	11.3	5.2	13.7	5.6	14.9	6.0	15.3	6.2	15.5	6.3	16.8	6.6	17.0	6.7	17.0
21 CRFL	0.0	0.0	3.6	0.0	4.4	9.4	4.7	11.7	5.2	12.0	5.7	15.1	5.8	15.3	6.3	16.4	6.4	16.9	6.7	17.0	6.9	17.0
22 CYPD	3.1	0.0	3.8	0.0	4.7	12.8	5.0	12.9	5.7	15.2	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 DECE	0.0	0.0	0.0	0.0	4.6	0.0	4.8	9.8	5.3	10.7	6.5	12.9	6.9	16.3	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
24 DEPI	0.0	0.0	0.0	0.0	0.0	0.0	4.6	12.4	5.3	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 ERCE	0.0	0.0	0.0	0.0	3.0	0.0	4.0	0.0	4.3	9.0	5.4	10.2	6.1	11.5	6.3	13.2	6.4	14.5	6.5	15.1	6.6	16.2
26 ERGV	3.6	0.0	3.9	9.2	4.5	9.8	4.8	11.3	5.2	11.8	5.6	16.0	6.1	16.2	6.2	16.7	6.3	16.9	6.8	17.0	7.3	17.0
27 ERPU	0.0	0.0	0.0	0.0	4.6	9.1	4.7	9.3	5.1	11.7	5.3	13.2	5.6	0.0	6.1	16.9	6.3	17.0	6.9	17.0	0.0	0.0
28 EUP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 GISP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	11.2	0.0	0.0	6.3	13.5	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
30 HAAC	2.7	0.0	0.0	0.0	4.6	9.1	4.7	9.2	0.0	0.0	6.1	16.9	6.2	17.0	6.5	17.0	6.8	17.0	7.2	17.0	0.0	0.0
31 KCCR	0.0	0.0	0.0	0.0	4.6	9.0	5.0	9.6	5.2	11.5	5.4	13.7	5.8	16.2	6.3	16.5	6.5	16.8	6.6	16.9	6.6	17.0
32 LARE	0.0	0.0	0.0	0.0	3.0	0.0	4.5	11.5	0.0	0.0	0.0	0.0	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
33 LES	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	12.1	6.2	14.5	6.4	15.8	6.5	16.3	6.9	16.5	7.0	16.9	7.1	16.9
34 LEPU	2.1	0.0	0.0	0.0	4.0	0.0	4.2	9.8	4.8	11.1	5.2	12.9	5.8	0.0	6.4	16.9	6.6	17.0	6.8	17.0	6.9	17.0
35 LIRU	0.0	0.0	0.0	0.0	4.2	9.2	4.6	9.9	5.0	11.0	0.0	0.0	5.4	14.2	5.9	15.6	0.0	0.0	0.0	0.0	0.0	0.0
36 MACA	3.1	0.0	0.0	0.0	3.3	0.0	4.2	0.0	4.7	0.0	4.9	9.3	5.4	10.2	6.2	10.9	6.5	13.5	6.5	13.6	6.7	14.5
37 MAGR	0.0	0.0	0.0	0.0	3.8	9.0	4.2	9.7	0.0	0.0	5.5	12.8	5.8	14.6	6.0	16.7	6.5	16.8	6.5	16.9	7.3	17.0
38 MEAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 OPPO	1.0	0.0	0.0	0.0	3.0	9.2	3.3	9.4	4.3	9.7	5.0	10.7	5.4	13.1	5.7	15.5	5.9	15.9	5.9	16.2	5.9	16.9
40 ORFA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	10.1	5.4	12.9	6.4	13.8	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0
41 ORFY	2.0	0.0	3.3	0.0	4.3	0.0	5.0	0.0	5.2	11.3	5.8	14.1	6.2	16.7	6.4	16.9	6.6	17.0	6.8	17.0	6.9	17.0
42 PEFR	3.7	0.0	3.9	9.1	4.1	9.1	4.4	9.8	4.8	11.6	5.7	15.3	6.4	16.0	6.6	16.2	0.0	0.0	0.0	0.0	6.8	16.9
43 PHFO	3.6	0.0	3.9	10.3	4.5	11.7	4.7	11.8	5.4	14.4	5.8	16.5	6.2	16.9	6.9	17.0	0.0	0.0	0.0	0.0	0.0	0.0
44 POSE	3.2	0.0	4.1	0.0	4.5	9.0	4.9	0.0	5.3	11.8	6.9	15.9	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
45 PSTE	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	4.9	11.5	0.0	0.0	5.5	14.2	0.0	0.0	6.2	15.9	6.6	16.5	0.0	0.0
46 SPCD	3.7	0.0	4.0	0.0	0.0	0.0	4.5	0.0	4.7	10.1	5.3	14.2	5.6	16.2	6.1	16.7	6.2	16.9	6.7	17.0	6.8	17.0
47 STCD	0.0	0.0	4.1	0.0	4.3	0.0	5.0	9.4	5.4	10.1	5.6	13.2	6.2	16.7	6.5	16.9	6.6	17.0	6.8	17.0	7.1	17.0
48 TECA	0.0	0.0	3.1	0.0	4.1	0.0	4.2	0.0	4.5	0.0	4.8	0.0	5.4	11.1	6.1	12.1	6.3	12.3	6.5	15.7	6.6	16.7
49 TOIN	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	11.8	0.0	0.0	5.5	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50 VINU	0.0	0.0	0.0	0.0	4.9	11.6	5.0	12.1	5.4	14.7	6.1	0.0	6.9	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51 XASA	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	4.9	0.0	0.0	0.0	6.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0
52 ZIVE	0.0	0.0	3.4	0.0	4.6	9.9	5.0	12.5	5.5	13.6	6.6	15.7	6.9	16.8	6.9	16.9	8.0	17.0	0.0	0.0	0.0	0.0

PHENOLOGICAL INVENTORY

STUDY AREA UP GOV'T

1980

TYPE SITE ARTR-AGSM

		20 APRIL		04 MAY		22 MAY		04 JUNE		18 JUNE		02 JULY		16 JULY		01 AUG		14 AUG		30 AUG		20 SEPT	
SPECIES		VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR	VEG	REPR

1	AGSM	3.7	0.0	4.3	0.0	4.7	0.0	4.8	0.0	5.4	0.0	5.6	14.3	5.6	14.8	6.3	15.0	6.7	15.3	6.9	16.5	6.9	16.9
2	ALTE	3.3	0.0	4.3	9.2	4.8	9.7	5.2	11.2	5.7	14.1	6.3	14.8	6.7	15.6	6.8	16.3	6.9	16.8	8.0	17.0	0.0	0.0
3	ANDI	3.2	0.0	4.1	9.2	4.3	9.5	4.7	11.3	4.9	13.1	5.7	14.0	6.6	15.5	6.9	16.9	8.0	17.0	8.0	17.0	0.0	0.0
4	ANSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	13.5	6.4	14.8	6.8	16.5	8.0	16.9	8.0	17.0	0.0	0.0
5	ARH02	0.0	0.0	4.2	9.3	4.1	12.9	4.5	14.3	6.1	15.6	6.5	16.0	6.8	16.4	8.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
6	ARLI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	14.5	6.0	14.9	6.5	15.8	6.9	16.7	8.0	17.0	0.0	0.0
7	ARTR	2.2	0.0	3.5	0.0	3.8	0.0	4.2	0.0	4.1	9.1	3.9	9.1	4.1	9.2	4.3	9.3	4.6	9.6	5.2	10.3	5.8	14.2
8	ASDR	0.0	0.0	0.0	0.0	4.5	9.3	4.9	10.3	5.3	12.1	5.8	14.2	5.5	15.0	6.3	15.7	6.7	16.5	6.9	16.7	8.0	16.9
9	ASPU	3.1	0.0	4.1	10.5	4.4	11.0	4.8	13.2	5.0	14.4	6.0	14.5	6.3	15.6	6.9	16.9	8.0	17.0	8.0	17.0	0.0	0.0
10	BOGR	3.2	0.0	0.0	0.0	4.6	0.0	5.2	0.0	5.4	0.0	6.0	0.0	6.1	0.0	6.3	0.0	6.5	0.0	6.6	0.0	6.8	0.0
11	BRIE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	10.4	6.0	12.5	6.3	14.5	6.7	16.0	6.9	16.6	8.0	17.0	0.0	0.0
12	CANL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	14.0	6.5	15.0	8.0	15.9	0.0	0.0	0.0	0.0	0.0	0.0
13	CAS	3.1	0.0	4.1	9.2	4.7	9.9	5.2	10.6	5.3	13.3	5.8	13.8	6.1	15.0	6.5	16.1	6.8	16.5	6.9	16.6	8.0	17.0
14	CHVI	3.0	0.0	3.7	0.0	4.3	0.0	4.6	0.0	5.0	0.0	5.2	0.0	5.4	9.7	5.6	10.2	5.8	10.5	6.1	12.9	6.2	13.1
15	CRAC	3.1	0.0	3.9	0.0	4.3	9.0	4.7	11.5	5.2	12.8	6.0	14.2	6.4	15.3	6.7	16.5	6.8	16.7	8.0	17.0	0.0	0.0
16	CYMG	0.0	0.0	3.9	10.4	0.0	0.0	0.0	0.0	0.0	0.0	6.8	16.3	0.0	0.0	8.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
17	DEPI	0.0	0.0	0.0	0.0	3.1	0.0	4.3	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	ERPU	3.5	9.0	0.0	0.0	4.4	9.2	4.6	10.1	5.0	11.4	5.5	11.4	5.5	12.3	5.7	15.0	6.0	15.6	6.2	16.5	6.8	16.9
19	HAAC	3.1	0.0	0.0	0.0	4.7	11.3	4.9	12.7	5.1	13.6	5.2	16.9	5.4	17.0	6.0	17.0	6.5	17.0	6.7	17.0	6.8	17.0
20	KOCR	4.1	0.0	4.1	0.0	5.2	9.1	5.6	10.4	5.8	12.4	5.9	13.5	6.0	14.6	6.3	15.8	6.5	16.3	6.6	16.9	6.7	17.0
21	LARE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	9.1	6.6	16.2	0.0	0.0	8.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
22	LERE	3.5	0.0	3.9	0.0	4.2	9.9	4.5	9.9	4.8	13.4	5.8	12.5	6.9	16.6	8.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
23	LFS	3.2	0.0	3.8	0.0	4.0	9.0	4.3	9.6	0.0	0.0	5.8	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	LOFO	3.6	10.3	3.8	10.6	5.2	13.8	5.6	14.7	5.7	14.9	0.0	0.0	6.3	15.9	8.0	16.9	0.0	0.0	0.0	0.0	0.0	0.0
25	MACA	0.0	0.0	4.1	0.0	4.3	9.0	4.7	9.6	5.2	10.6	5.2	12.2	5.3	12.6	6.0	14.0	6.4	16.0	6.8	16.9	8.0	17.0
26	OPFO	1.0	0.0	1.0	0.0	3.0	9.2	3.4	9.4	3.7	10.0	5.0	14.3	5.2	14.8	5.5	15.3	5.7	15.7	5.9	16.4	6.0	16.9
27	PECL	3.2	0.0	4.0	0.0	4.2	9.0	4.8	10.1	5.3	12.3	5.8	14.0	5.8	14.6	6.0	15.3	6.3	16.7	6.8	16.7	6.9	16.6
28	PHFO	3.5	9.7	4.1	11.2	5.0	12.0	5.2	14.6	5.6	15.3	6.0	15.8	6.3	16.2	6.5	16.7	6.8	16.9	6.9	17.0	0.0	0.0
29	PLPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	13.8	6.4	14.2	6.8	15.0	6.9	15.4	8.0	16.1	0.0	0.0
30	POSE	3.7	0.0	4.9	0.0	4.9	0.0	5.3	0.0	6.2	0.0	6.6	15.0	6.8	15.4	6.9	16.0	6.9	16.5	8.0	16.9	0.0	0.0
31	SPCO	1.0	0.0	3.3	0.0	4.2	9.0	4.7	0.0	4.9	11.2	5.2	11.7	5.5	14.8	5.9	16.1	6.3	16.6	6.4	16.9	6.7	17.0
32	STCO	3.3	0.0	5.0	0.0	5.0	0.0	5.1	9.8	5.7	10.9	5.8	11.5	5.9	14.7	6.2	16.0	6.4	16.2	6.4	16.5	6.7	16.8
33	TRDU	0.0	0.0	1.0	0.0	3.1	0.0	4.4	9.3	4.7	0.0	5.7	16.5	5.9	16.7	6.1	16.9	6.7	17.0	7.1	17.0	0.0	0.0
34	VIAM	0.0	0.0	3.8	0.0	4.7	9.7	5.2	11.5	5.6	12.8	6.3	13.0	6.5	15.0	6.7	16.2	6.9	16.7	8.0	17.0	0.0	0.0
35	VINU	0.0	0.0	0.0	0.0	4.8	11.7	5.1	12.9	5.4	0.0	5.8	16.9	6.7	17.0	6.9	17.0	8.0	17.0	8.0	17.0	0.0	0.0
36	XASA	3.0	0.0	4.4	0.0	4.4	0.0	4.8	0.0	5.3	0.0	5.4	9.0	5.5	9.2	5.9	10.4	6.0	10.8	6.1	12.3	6.2	14.6

TABLE IV. Prime species intensive phenological inventory for 1980 by exclosure, plant species, and date collection date for each permanently identified plant. Intra-tabular tables of contents and check list of contents and check list of sampling times.

[illegible]

TABLE IV. (continued)

Average dates and ranges of dates for sampling periods			
Sampling Period	Average Date	Range of Dates	Days Since Previous Sampling Period Date
1	April 12	April 4 - 13 ²	
2	April 23	April 19 - 27	11
3	May 2	April 31 - May 4	11
4	May 24	May 19 - 29	22
5	June 6	June 2 - 11	11
6	June 18	June 16 - 20	12
7	July 1	June 30 - July 3	13
8	July 15	July 13 - 16	14
9	August 1	July 28 - August 4	17
10	Aug. 13 & 23 ³	August 11 to 26	22
11	Sept. 2	Aug. 29 - Sept. 6	19
12	Sept. 20	Sept. 19 - 21	20

¹ Data recorded twice during this period.

² One sample was taken April 4; the remainder were taken on April 12 and 13.

³ Nineteen samples were taken during the period of August 11 through 14. Seven samples were taken during the period of August 20 through 26. No samples were done from August 15 through 20.

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 13 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.2	0.0	.1	4.0	0.0	0.0	1.0
2	3.1	0.0	.2	2.0	0.0	0.0	1.0
3	2.2	0.0	.1	1.0	0.0	0.0	1.0
4	2.3	0.0	.1	2.0	0.0	0.0	1.0
5	2.2	0.0	.1	2.0	0.0	0.0	2.0
6	2.2	0.0	.2	1.0	0.0	0.0	1.0
7	2.2	0.0	.1	3.0	0.0	0.0	3.0
8	2.1	0.0	.1	1.0	0.0	0.0	1.0
9	1.0	0.0	0.0	0.0	0.0	0.0	3.0
10	2.4	0.0	.2	4.0	0.0	0.0	1.0
11	3.1	0.0	.2	3.0	0.0	0.0	2.0
12	1.0	0.0	0.0	0.0	0.0	0.0	1.0
13	1.0	0.0	0.0	0.0	0.0	0.0	1.0
14	1.0	0.0	0.0	0.0	0.0	0.0	1.0
15	1.0	0.0	0.0	0.0	0.0	0.0	1.0
16	1.0	0.0	0.0	0.0	0.0	0.0	2.0
17	2.2	0.0	.1	2.0	0.0	0.0	1.0
18	2.7	0.0	.2	10.0	0.0	0.0	1.0
19	1.0	0.0	0.0	0.0	0.0	0.0	1.0
20	1.0	0.0	0.0	0.0	0.0	0.0	4.0
MEAN	1.9	0.0	.1	2.9	0.0	0.0	1.5
STD DEV	.8	0.0	.1	2.5	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 27 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.6	0.0	.2	8.0	0.0	0.0	1.0
2	3.4	0.0	.1	4.0	0.0	0.0	1.0
3	3.5	0.0	.1	6.0	0.0	0.0	2.0
4	3.4	0.0	.2	9.0	0.0	0.0	2.0
5	3.6	0.0	.1	7.0	0.0	0.0	1.0
6	3.8	0.0	.1	10.0	0.0	0.0	1.0
7	3.5	0.0	.2	11.0	0.0	0.0	1.0
8	3.6	0.0	.2	9.0	0.0	0.0	1.0
9	3.7	0.0	.1	8.0	0.0	0.0	1.0
10	3.8	0.0	.2	11.0	0.0	0.0	1.0
11	3.6	0.0	.2	9.0	0.0	0.0	1.0
12	3.3	0.0	.1	5.0	0.0	0.0	1.0
13	3.5	0.0	.2	9.0	0.0	0.0	1.0
14	3.7	0.0	.2	11.0	0.0	0.0	1.0
15	3.3	0.0	.1	5.0	0.0	0.0	1.0
16	3.4	0.0	.1	5.0	0.0	0.0	1.0
17	3.5	0.0	.1	8.0	0.0	0.0	1.0
18	3.2	0.0	.1	7.0	0.0	0.0	1.0
19	3.4	0.0	.1	5.0	0.0	0.0	1.0
20	3.8	0.0	.1	9.0	0.0	0.0	1.0
MEAN	3.5	0.0	.1	7.8	0.0	0.0	1.1
STD DEV	.2	0.0	.1	2.2	0.0	0.0	.3

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEC. PLANT

1	3.9	0.0	.3	15.0	0.0	0.0	1.0
2	3.7	0.0	.2	11.5	0.0	0.0	2.0
3	3.8	0.0	.2	12.5	0.0	0.0	2.0
4	4.8	0.0	.2	7.3	0.0	0.0	2.0
5	3.9	0.0	.2	11.0	0.0	0.0	3.0
6	4.7	0.0	.2	12.0	0.0	0.0	2.0
7	3.7	0.0	.2	9.5	0.0	0.0	1.0
8	4.5	0.0	.2	13.0	0.0	0.0	1.0
9	3.9	0.0	.2	11.0	0.0	0.0	1.0
10	3.5	0.0	.2	16.0	0.0	0.0	1.0
11	4.9	0.0	.3	14.5	0.0	0.0	2.0
12	4.9	0.0	.2	15.0	0.0	0.0	2.0
13	4.1	0.0	.2	6.5	0.0	0.0	1.0
14	4.3	0.0	.2	12.5	0.0	0.0	4.0
15	4.6	0.0	.2	15.0	0.0	0.0	3.0
16	4.4	0.0	.2	10.5	0.0	0.0	3.0
17	4.7	0.0	.2	10.5	0.0	0.0	1.0
18	4.9	0.0	.2	11.5	0.0	0.0	2.0
19	4.2	0.0	.2	12.0	0.0	0.0	1.0
20	4.8	0.0	.2	7.5	0.0	0.0	1.0
MEAN	4.3	0.0	.2	11.8	0.0	0.0	1.8
STD DEV	.5	0.0	.0	2.7	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
*****	*****	*****	*****	*****	*****	*****	*****	*****
1	4.1	0.0	.3	20.9	0.0	0.0	0.0	
2	4.3	0.0	.2	10.0	****	0.0	0.0	1ST
3	4.5	0.0	.3	15.9	0.0	0.0	0.0	
4	4.0	0.0	.2	6.0	****	0.0	0.0	
5	4.4	0.0	.3	14.2	0.0	0.0	0.0	
6	3.7	0.0	.3	15.6	0.0	0.0	0.0	
7	4.6	0.0	.3	16.5	0.0	0.0	0.0	2ND PLUS ONE
8	3.1	0.0	.2	5.0	****	0.0	0.0	
9	4.9	0.0	.3	16.1	0.0	0.0	0.0	
10	4.8	0.0	.3	13.5	0.0	0.0	0.0	
11	3.1	0.0	.3	8.5	0.0	0.0	0.0	
12	4.6	0.0	.3	15.1	0.0	0.0	0.0	
13	4.7	0.0	.3	10.9	0.0	0.0	0.0	
14	4.9	0.0	.3	22.6	0.0	0.0	0.0	
15	4.8	0.0	.3	17.6	0.0	0.0	0.0	
16	3.1	0.0	.3	14.4	0.0	0.0	0.0	
17	5.5	0.0	.4	24.1	0.0	0.0	0.0	
18	4.9	0.0	.4	26.8	0.0	0.0	0.0	
19	3.9	0.0	.3	16.0	0.0	0.0	0.0	
20	3.7	0.0	.2	5.0	****	0.0	0.0	3RD PLUS ONE
MEAN	4.3	0.0	.3	14.7	****	0.0	0.0	
STD DEV	.7	0.0	.1	6.0	****	0.0	0.0	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 19 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	5.2	0.0	.1	17.5	0.0	0.0	4.0	1ST
2	4.9	0.0	.1	21.9	0.0	0.0	1.0	
3	5.8	0.0	.1	21.4	0.0	0.0	1.0	
4	5.8	0.0	.1	21.2	0.0	0.0	1.0	2ND
5	5.5	0.0	.2	19.5	0.0	0.0	1.0	
6	4.9	0.0	.2	12.5	0.0	0.0	1.0	
7	5.6	0.0	.1	8.5	0.0	0.0	1.0	
8	5.8	0.0	.1	21.3	0.0	0.0	1.0	
9	5.5	0.0	.1	25.2	0.0	0.0	2.0	
10	5.2	0.0	.1	15.5	0.0	0.0	1.0	
11	5.1	0.0	.1	17.1	0.0	0.0	1.0	
12	5.6	0.0	.2	28.6	0.0	0.0	1.0	
13	5.5	0.0	.2	24.4	0.0	0.0	1.0	
14	5.4	0.0	.1	19.6	0.0	0.0	2.0	3RD
15	5.7	0.0	.1	23.9	0.0	0.0	1.0	
16	5.8	0.0	.2	21.2	0.0	0.0	1.0	
17	5.6	0.0	.1	17.0	0.0	0.0	1.0	
18	5.3	0.0	.1	16.4	0.0	0.0	1.0	
19	5.0	0.0	.1	14.1	0.0	0.0	1.0	
20	5.6	0.0	.2	21.4	0.0	0.0	1.0	
MEAN	5.4	0.0	.1	19.4	0.0	0.0	1.3	
STD DEV	.3	0.0	.0	4.7	0.0	0.0	.7	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.9	0.0	.3	12.3	0.0	0.0	1.0
2	4.8	0.0	.3	21.1	0.0	0.0	2.0
3	4.6	0.0	.3	14.3	0.0	0.0	2.0
4	4.7	0.0	.2	11.1	0.0	0.0	1.0
5	4.9	0.0	.3	12.5	0.0	0.0	2.0
6	4.8	0.0	.3	18.0	0.0	0.0	1.0
7	4.5	0.0	.3	18.7	0.0	0.0	1.0
8	4.3	0.0	.3	19.2	0.0	0.0	2.0
9	4.8	0.0	.3	19.1	0.0	0.0	1.0
10	4.9	0.0	.3	23.8	0.0	0.0	1.0
11	4.9	0.0	.3	26.9	0.0	0.0	1.0
12	5.3	0.0	.3	29.5	0.0	0.0	1.0
13	4.8	0.0	.3	25.8	0.0	0.0	1.0
14	3.9	0.0	.3	12.0	0.0	0.0	1.0
15	4.9	0.0	.3	18.2	0.0	0.0	1.0
16	4.9	0.0	.3	23.3	0.0	0.0	1.0
17	4.8	0.0	.3	17.1	0.0	0.0	1.0
18	4.9	0.0	.3	19.3	0.0	0.0	1.0
19	3.9	0.0	.2	10.2	0.0	0.0	1.0
20	4.2	0.0	.3	18.2	0.0	0.0	1.0
MEAN	4.7	0.0	.3	18.5	0.0	0.0	1.2
STD DEV	.4	0.0	.0	5.5	0.0	0.0	.4

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	5.9	0.0	.3	19.4	0.0	0.0	1.0
2	6.1	0.0	.3	28.2	0.0	0.0	1.0
3	5.9	0.0	.3	18.1	0.0	0.0	1.0
4	6.0	0.0	.3	19.8	0.0	0.0	6.0
5	6.2	0.0	.3	23.6	0.0	0.0	1.0
6	6.1	0.0	.2	13.5	0.0	0.0	2.0
7	5.7	0.0	.3	21.2	0.0	0.0	1.0
8	5.6	0.0	.3	17.5	0.0	0.0	1.0
9	5.9	0.0	.3	13.1	0.0	0.0	2.0
10	6.0	0.0	.3	14.2	0.0	0.0	2.0
11	6.1	0.0	.3	13.9	0.0	0.0	3.0
12	5.8	0.0	.4	15.7	0.0	0.0	3.0
13	6.1	0.0	.3	15.9	0.0	0.0	2.0
14	6.0	0.0	.3	14.6	0.0	0.0	3.0
15	6.1	0.0	.4	18.6	0.0	0.0	2.0
16	6.0	0.0	.3	20.3	0.0	0.0	3.0
17	5.9	0.0	.4	16.0	0.0	0.0	2.0
18	6.1	0.0	.4	21.6	0.0	0.0	2.0
19	6.0	0.0	.4	23.0	0.0	0.0	2.0
20	6.2	0.0	.3	13.5	0.0	0.0	2.0
MEAN	6.0	0.0	.3	18.1	0.0	0.0	2.1
STD DEV	.2	0.0	.1	4.1	0.0	0.0	1.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.8	0.0	.2	3.6	0.0	0.0	2.0
2	6.8	0.0	.3	19.1	0.0	0.0	1.0
3	6.9	0.0	.2	6.7	0.0	0.0	2.0
4	6.9	0.0	.3	8.1	0.0	0.0	1.0
5	6.8	0.0	.3	9.8	0.0	0.0	2.0
6	6.9	0.0	.3	10.6	0.0	0.0	1.0
7	6.9	0.0	.2	6.6	0.0	0.0	1.0
8	6.9	0.0	.2	6.5	0.0	0.0	1.0
9	6.9	0.0	.2	11.1	0.0	0.0	1.0
10	6.9	0.0	.2	5.6	0.0	0.0	1.0
11	6.9	0.0	.2	4.9	0.0	0.0	1.0
12	6.8	0.0	.2	10.2	0.0	0.0	1.0
13	6.9	0.0	.2	9.5	0.0	0.0	1.0
14	6.7	0.0	.3	12.7	0.0	0.0	1.0
15	6.9	0.0	.2	4.4	0.0	0.0	1.0
16	6.8	0.0	.3	9.2	0.0	0.0	1.0
17	6.9	0.0	.3	11.0	0.0	0.0	1.0
18	6.8	0.0	.3	3.2	0.0	0.0	2.0
19	6.8	0.0	.3	8.3	0.0	0.0	2.0
20	6.9	0.0	.3	16.0	0.0	0.0	2.0
MEAN	6.9	0.0	.3	8.9	0.0	0.0	1.3
STD DEV	.1	0.0	.1	4.0	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 20 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.9	0.0	.2	15.8	0.0	0.0	1.0
2	6.9	0.0	.1	14.2	0.0	0.0	1.0
3	6.8	0.0	.2	18.4	0.0	0.0	1.0
4	6.8	0.0	.1	9.5	0.0	0.0	1.0
5	6.9	0.0	.1	12.6	0.0	0.0	1.0
6	6.8	0.0	.1	16.2	0.0	0.0	2.0
7	6.8	0.0	.2	11.2	0.0	0.0	2.0
8	6.8	0.0	.1	11.7	0.0	0.0	1.0
9	6.9	0.0	.1	8.7	0.0	0.0	2.0
10	6.8	0.0	.1	9.8	0.0	0.0	3.0
11	6.8	0.0	.1	17.6	0.0	0.0	4.0
12	6.9	0.0	.1	13.1	0.0	0.0	2.0
13	6.9	0.0	.2	10.0	0.0	0.0	2.0
14	6.9	0.0	.1	8.1	0.0	0.0	1.0
15	6.9	0.0	.2	11.7	0.0	0.0	1.0
16	6.9	0.0	.1	12.8	0.0	0.0	1.0
17	6.8	0.0	.2	14.1	0.0	0.0	4.0
18	6.8	0.0	.2	9.7	0.0	0.0	1.0
19	6.8	0.0	.1	21.5	0.0	0.0	2.0
20	6.8	0.0	.1	3.6	0.0	0.0	1.0
MEAN	6.8	0.0	.1	12.5	0.0	0.0	1.7
STD DEV	.1	0.0	.0	4.1	0.0	0.0	1.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 6 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	8.0	0.0	.3	11.6	0.0	0.0	1.0
2	8.0	0.0	.3	13.6	0.0	0.0	2.0
3	8.0	0.0	.3	14.6	0.0	0.0	2.0
4	8.0	0.0	.2	3.2	0.0	0.0	1.0
5	6.9	0.0	.2	8.8	0.0	0.0	1.0
6	8.0	0.0	.2	4.0	0.0	0.0	1.0
7	8.0	0.0	.3	9.1	0.0	0.0	2.0
8	8.0	0.0	.3	9.9	0.0	0.0	2.0
9	8.0	0.0	.3	11.6	0.0	0.0	2.0
10	8.0	0.0	.2	7.0	0.0	0.0	1.0
11	8.0	0.0	.2	6.9	0.0	0.0	1.0
12	6.9	0.0	.3	19.4	0.0	0.0	3.0
13	8.0	0.0	.3	17.1	0.0	0.0	3.0
14	8.0	0.0	.3	5.7	0.0	0.0	1.0
15	8.0	0.0	.3	15.7	0.0	0.0	1.0
16	8.0	0.0	.3	7.5	0.0	0.0	3.0
17	8.0	0.0	.3	10.4	0.0	0.0	3.0
18	8.0	0.0	.3	20.0	0.0	0.0	2.0
19	8.0	0.0	.3	3.5	0.0	0.0	2.0
20	8.0	0.0	.3	27.2	0.0	0.0	1.0
MEAN	7.9	0.0	.3	11.3	0.0	0.0	1.8
STD DEV	.3	0.0	.0	6.2	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	8.0	0.0	.2	3.2	0.0	0.0	1.0
2	6.9	0.0	.2	16.3	0.0	0.0	1.0
3	8.0	0.0	.2	13.5	0.0	0.0	1.0
4	8.0	0.0	.2	10.6	0.0	0.0	1.0
5	8.0	0.0	.2	13.0	0.0	0.0	2.0
6	7.1	0.0	.2	4.5	0.0	0.0	2.0
7	7.1	0.0	.2	4.2	0.0	0.0	1.0
8	6.9	0.0	.2	10.1	0.0	0.0	2.0
9	6.9	0.0	.2	9.9	0.0	0.0	1.0
10	7.1	0.0	.2	3.5	0.0	0.0	2.0
11	7.1	0.0	.2	3.6	0.0	0.0	1.0
12	8.0	0.0	.2	8.0	0.0	0.0	2.0
13	7.1	0.0	.2	1.8	0.0	0.0	2.0
14	8.0	0.0	.3	15.0	0.0	0.0	2.0
15	8.0	0.0	.3	12.8	0.0	0.0	1.0
16	7.1	0.0	.2	2.5	0.0	0.0	1.0
17	8.0	0.0	.2	13.0	0.0	0.0	1.0
18	8.0	0.0	.2	7.7	0.0	0.0	4.0
19	8.0	0.0	.2	14.4	0.0	0.0	3.0
20	8.0	0.0	.3	15.0	0.0	0.0	3.0
MEAN	7.6	0.0	.2	9.2	0.0	0.0	1.7
STD DEV	.5	0.0	.0	5.0	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 20 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	4.8	0.0	.3	12.8	0.0	0.0	3.0
2	4.7	0.0	.2	12.6	0.0	0.0	2.0
3	4.4	0.0	.2	11.6	0.0	0.0	2.0
4	4.6	0.0	.2	19.5	0.0	0.0	1.0
5	4.5	0.0	.2	19.4	0.0	0.0	2.0
6	4.6	0.0	.2	14.2	0.0	0.0	1.0
7	4.7	0.0	.2	18.2	0.0	0.0	2.0
8	4.7	0.0	.2	14.6	0.0	0.0	2.0
9	4.8	0.0	.2	15.0	0.0	0.0	2.0
10	4.8	0.0	.2	14.5	0.0	0.0	1.0
11	4.8	0.0	.2	17.5	0.0	0.0	2.0
12	4.7	0.0	.2	14.6	0.0	0.0	3.0
13	4.6	0.0	.2	12.2	0.0	0.0	2.0
14	4.8	0.0	.2	13.0	0.0	0.0	3.0
15	4.7	0.0	.2	15.0	0.0	0.0	2.0
16	4.8	0.0	.2	14.7	0.0	0.0	2.0
17	4.3	0.0	.2	12.3	0.0	0.0	2.0
18	4.4	0.0	.2	15.2	0.0	0.0	2.0
19	4.8	0.0	.2	9.7	0.0	0.0	2.0
20	4.7	0.0	.2	17.0	0.0	0.0	2.0
MEAN	4.7	0.0	.2	14.7	0.0	0.0	2.0
STD DEV	.2	0.0	.0	2.6	0.0	0.0	.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 11 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	5.3	0.0	.3	23.0	0.0	0.0	1.0
2	5.3	0.0	.3	21.0	0.0	0.0	2.0
3	4.7	0.0	.2	15.5	0.0	0.0	20.0
4	5.8	0.0	.2	12.0	0.0	0.0	10.0
5	4.9	0.0	.2	15.0	0.0	0.0	10.0
6	5.4	0.0	.2	24.0	0.0	0.0	1.0
7	5.3	0.0	.3	22.5	0.0	0.0	1.0
8	4.9	0.0	.1	13.0	0.0	0.0	1.0
9	4.1	0.0	.1	12.0	0.0	0.0	1.0
10	5.8	0.0	.3	24.0	0.0	0.0	1.0
11	6.0	0.0	.3	25.0	0.0	0.0	1.0
12	6.0	0.0	.3	21.5	0.0	0.0	1.0
13	5.8	0.0	.3	19.0	0.0	0.0	2.0
14	5.2	0.0	.3	21.0	0.0	0.0	1.0
15	4.1	0.0	.1	10.5	0.0	0.0	3.0
16	5.4	0.0	.2	22.0	0.0	0.0	2.0
17	4.9	0.0	.2	18.0	0.0	0.0	1.0
18	4.9	0.0	.2	23.5	0.0	0.0	1.0
19	5.3	0.0	.2	22.0	0.0	0.0	1.0
20	5.5	0.0	.2	19.0	0.0	0.0	1.0
MEAN	5.2	0.0	.2	19.2	0.0	0.0	3.1
STD DEV	.5	0.0	.1	4.6	0.0	0.0	4.8

5 LEAVES PRESENT
5 LEAVES PRESENT
2ND

42

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 17 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	5.4	0.0	.3	25.1	0.0	0.0	1.0	
2	5.7	0.0	.3	23.5	0.0	0.0	2.0	
3	5.6	0.0	.2	18.6	0.0	0.0	1.0	
4	5.5	0.0	.2	18.5	0.0	0.0	1.0	
5	5.5	0.0	.2	20.9	0.0	0.0	2.0	
6	5.1	0.0	.1	11.8	0.0	0.0	1.0	
7	5.3	0.0	.2	16.8	0.0	0.0	1.0	1ST
8	5.6	0.0	.2	19.2	0.0	0.0	2.0	
9	5.9	0.0	.3	24.2	0.0	0.0	2.0	6 IVS PRESENT
10	5.1	0.0	.2	18.9	0.0	0.0	4.0	
11	5.4	0.0	.2	23.6	0.0	0.0	2.0	
12	5.3	0.0	.2	14.5	0.0	0.0	2.0	
13	5.9	0.0	.3	25.0	0.0	0.0	3.0	6 IVS PRESENT ⁴³
14	5.6	0.0	.2	12.9	0.0	0.0	2.0	
15	5.8	0.0	.2	16.5	0.0	0.0	2.0	
16	5.6	0.0	.2	18.1	0.0	0.0	2.0	2ND
17	5.6	0.0	.3	23.6	0.0	0.0	1.0	
18	5.7	0.0	.3	25.6	0.0	0.0	1.0	
19	5.7	0.0	.3	25.1	0.0	0.0	2.0	
20	5.5	0.0	.3	28.7	0.0	0.0	2.0	
MEAN	5.5	0.0	.2	20.6	0.0	0.0	1.8	
STD DEV	.2	0.0	.1	4.7	0.0	0.0	.8	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	5.9	11.0	.4	35.4	54.4	1.0	2.0
2	5.8	0.0	.3	29.0	0.0	0.0	2.0
3	5.8	0.0	.3	29.5	0.0	0.0	5.0
4	5.9	0.0	.3	33.2	0.0	0.0	4.0
5	5.8	0.0	.3	32.9	0.0	0.0	3.0
6	5.5	0.0	.3	24.0	0.0	0.0	1.0
7	5.6	0.0	.3	22.3	0.0	0.0	3.0
8	5.1	0.0	.2	23.6	0.0	0.0	1.0
9	5.8	0.0	.2	21.9	0.0	0.0	4.0
10	5.6	0.0	.2	25.1	0.0	0.0	3.0
11	5.9	0.0	.3	28.0	0.0	0.0	1.0
12	5.9	0.0	.3	27.4	0.0	0.0	1.0
13	5.9	0.0	.2	27.2	0.0	0.0	6.0
14	5.5	0.0	.3	21.8	0.0	0.0	2.0
15	5.9	0.0	.2	23.1	0.0	0.0	3.0
16	5.8	0.0	.3	27.9	0.0	0.0	3.0
17	5.7	0.0	.3	23.6	0.0	0.0	3.0
18	5.9	0.0	.3	28.3	0.0	0.0	6.0
19	5.8	0.0	.3	24.2	0.0	0.0	1.0
20	5.9	0.0	.1	21.6	0.0	0.0	5.0
MEAN	5.7	11.0	.3	26.5	54.4	1.0	3.0
STD DEV	.2	0.0	.1	4.1	0.0	0.0	1.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 15 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	5.8	0.0	.3	23.1	0.0	0.0	4.0
2	5.8	0.0	.3	25.9	0.0	0.0	11.0
3	5.9	0.0	.2	21.2	0.0	0.0	2.0
4	5.7	0.0	.3	24.6	0.0	0.0	12.0
5	5.9	0.0	.2	24.1	0.0	0.0	5.0
6	5.9	0.0	.2	22.6	0.0	0.0	2.0
7	5.9	0.0	.3	17.8	0.0	0.0	4.0
8	5.9	0.0	.3	22.4	0.0	0.0	2.0
9	6.0	0.0	.3	23.6	0.0	0.0	6.0
10	6.0	0.0	.3	27.5	0.0	0.0	4.0
11	5.9	0.0	.3	23.2	0.0	0.0	3.0
12	6.0	0.0	.2	18.6	0.0	0.0	4.0
13	5.9	0.0	.1	24.2	0.0	0.0	2.0
14	6.1	0.0	.3	20.6	0.0	0.0	7.0
15	5.9	0.0	.1	29.8	0.0	0.0	2.0
16	5.9	0.0	.2	24.6	0.0	0.0	1.0
17	5.9	0.0	.3	20.3	0.0	0.0	1.0
18	5.9	0.0	.2	22.6	0.0	0.0	1.0
19	5.9	0.0	.2	19.4	0.0	0.0	1.0
20	5.6	0.0	.2	18.4	0.0	0.0	1.0
MEAN	5.9	0.0	.2	22.7	0.0	0.0	3.8
STD DEV	.1	0.0	.1	3.1	0.0	0.0	3.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 4 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.3	0.0	.2	22.3	0.0	0.0	2.0
2	6.2	0.0	.2	20.3	0.0	0.0	1.0
3	6.2	0.0	.2	24.3	0.0	0.0	2.0
4	6.2	0.0	.2	20.2	0.0	0.0	1.0
5	6.2	0.0	.2	16.7	0.0	0.0	1.0
6	6.3	0.0	.2	16.9	0.0	0.0	4.0
7	6.2	0.0	.2	20.3	0.0	0.0	3.0
8	6.2	0.0	.2	17.8	0.0	0.0	4.0
9	6.3	0.0	.2	18.7	0.0	0.0	6.0
10	6.3	0.0	.3	22.6	0.0	0.0	2.0
11	6.2	0.0	.2	16.5	0.0	0.0	1.0
12	6.3	0.0	.2	18.7	0.0	0.0	1.0
13	6.3	0.0	.2	23.6	0.0	0.0	4.0
14	6.4	0.0	.2	22.4	0.0	0.0	1.0
15	6.4	0.0	.2	25.4	0.0	0.0	4.0
16	6.5	0.0	.2	18.6	0.0	0.0	1.0
17	6.2	0.0	.2	21.9	0.0	0.0	2.0
18	6.3	0.0	.3	24.3	0.0	0.0	1.0
19	6.2	0.0	.2	18.1	0.0	0.0	2.0
20	6.2	0.0	.2	19.2	0.0	0.0	3.0
MEAN	6.3	0.0	.2	20.5	0.0	0.0	2.3
STD DEV	.1	0.0	.0	2.8	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 12 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.3	0.0	.1	20.5	0.0	0.0	1.0
2	6.2	0.0	.1	16.8	0.0	0.0	2.0
3	6.3	0.0	.2	22.3	0.0	0.0	1.0
4	6.4	0.0	.2	26.9	0.0	0.0	2.0
5	6.2	0.0	.1	20.7	0.0	0.0	2.0
6	6.3	0.0	.2	24.1	0.0	0.0	2.0
7	6.5	0.0	.2	29.4	0.0	0.0	1.0
8	6.3	0.0	.1	21.6	0.0	0.0	1.0
9	6.4	0.0	.1	20.1	0.0	0.0	1.0
10	6.3	0.0	.1	23.0	0.0	0.0	2.0
11	6.3	0.0	.2	27.5	0.0	0.0	1.0
12	6.2	0.0	.2	29.9	0.0	0.0	1.0
13	6.5	0.0	.2	27.6	0.0	0.0	1.0
14	6.2	0.0	.2	29.1	0.0	0.0	1.0
15	6.3	0.0	.2	32.5	0.0	0.0	1.0
16	6.4	0.0	.2	27.3	0.0	0.0	1.0
17	6.2	0.0	.2	26.1	0.0	0.0	1.0
18	6.3	0.0	.1	27.6	0.0	0.0	1.0
19	6.2	0.0	.2	28.7	0.0	0.0	2.0
20	6.5	0.0	.2	21.6	0.0	0.0	2.0

MEAN 6.3 0.0 .2 25.2 0.0 0.0 1.4

STD DEV .1 0.0 .0 4.1 0.0 0.0 .5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 31 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.4	0.0	.2	23.8	0.0	0.0	2.0
2	6.3	0.0	.2	23.5	0.0	0.0	1.0
3	6.4	0.0	.2	30.2	0.0	0.0	2.0
4	6.3	0.0	.2	26.5	0.0	0.0	2.0
5	6.5	0.0	.1	18.0	0.0	0.0	1.0
6	6.5	0.0	.1	19.5	0.0	0.0	2.0
7	6.5	0.0	.1	16.0	0.0	0.0	2.0
8	6.4	0.0	.2	23.0	0.0	0.0	6.0
9	6.3	0.0	.2	25.3	0.0	0.0	1.0
10	6.5	0.0	.1	21.2	0.0	0.0	2.0
11	6.5	0.0	.1	20.2	0.0	0.0	3.0
12	6.5	0.0	.2	32.5	0.0	0.0	1.0
13	6.5	0.0	.2	18.5	0.0	0.0	1.0
14	6.3	0.0	.1	19.8	0.0	0.0	2.0
15	6.4	0.0	.1	18.0	0.0	0.0	1.0
16	6.5	0.0	.2	23.6	0.0	0.0	1.0
17	6.6	0.0	.2	22.5	0.0	0.0	1.0
18	6.6	0.0	.2	27.0	0.0	0.0	2.0
19	6.5	0.0	.2	28.0	0.0	0.0	1.0
20	6.4	0.0	.2	25.5	0.0	0.0	3.0
MEAN	6.4	0.0	.2	23.1	0.0	0.0	1.9
STD DEV	.1	0.0	.0	4.4	0.0	0.0	1.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.4	0.0	.2	23.5	0.0	0.0	2.0
2	6.4	0.0	.2	20.5	0.0	0.0	3.0
3	6.5	0.0	.2	24.5	0.0	0.0	2.0
4	6.8	0.0	.1	21.5	0.0	0.0	1.0
5	6.4	0.0	.1	21.5	0.0	0.0	2.0
6	6.5	0.0	.1	20.0	0.0	0.0	1.0
7	6.4	0.0	.2	22.0	0.0	0.0	2.0
8	6.3	0.0	.2	23.0	0.0	0.0	4.0
9	6.5	0.0	.1	16.0	0.0	0.0	3.0
10	6.3	0.0	.1	13.5	0.0	0.0	1.0
11	6.3	0.0	.2	21.5	0.0	0.0	1.0
12	6.4	0.0	.2	22.5	0.0	0.0	1.0
13	6.3	0.0	.1	13.0	0.0	0.0	2.0
14	6.5	0.0	.2	18.5	0.0	0.0	1.0
15	6.4	0.0	.1	16.5	0.0	0.0	3.0
16	6.3	0.0	.1	22.5	0.0	0.0	3.0
17	6.5	0.0	.1	25.0	0.0	0.0	5.0
18	6.6	0.0	.2	23.4	0.0	0.0	2.0
19	6.5	0.0	.2	24.8	0.0	0.0	1.0
20	6.6	0.0	.2	22.0	0.0	0.0	1.0
MEAN	6.4	0.0	.2	20.8	0.0	0.0	2.1
STD DEV	.1	0.0	.1	3.5	0.0	0.0	1.1

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 12 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	PHENOLOGICAL SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.2	0.0	.1	3.6	0.0	0.0	1.0
2	3.1	0.0	.2	9.0	0.0	0.0	1.0
3	2.2	0.0	.3	11.2	0.0	0.0	2.0
4	2.3	0.0	.3	12.0	0.0	0.0	1.0
5	2.2	0.0	.2	11.0	0.0	0.0	2.0
6	2.2	0.0	.2	11.0	0.0	0.0	2.0
7	2.2	0.0	.2	12.9	0.0	0.0	1.0
8	1.0	0.0	.2	8.0	0.0	0.0	1.0
9	1.0	0.0	.2	9.0	0.0	0.0	1.0
10	2.7	0.0	.2	6.5	0.0	0.0	2.0
11	2.2	0.0	.2	7.7	0.0	0.0	1.0
12	1.0	0.0	.2	15.0	0.0	0.0	1.0
13	1.0	0.0	.2	7.8	0.0	0.0	1.0
14	1.0	0.0	.3	16.2	0.0	0.0	1.0
15	1.0	0.0	.2	7.5	0.0	0.0	2.0
16	1.0	0.0	.2	11.1	0.0	0.0	2.0
17	3.1	0.0	.2	15.5	0.0	0.0	1.0
18	2.4	0.0	.2	13.0	0.0	0.0	1.0
19	1.0	0.0	.2	9.2	0.0	0.0	2.0
20	2.1	0.0	.2	9.5	0.0	0.0	1.0
MEAN	1.9	0.0	.2	10.3	0.0	0.0	1.4
STD DEV	.8	0.0	.0	3.2	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 27 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	4.7	1.0	.3	22.0	0.0	0.0	1.0
2	3.6	1.0	.2	11.0	0.0	0.0	1.0
3	4.7	1.0	.4	19.0	0.0	0.0	3.0
4	3.6	1.0	.3	16.0	0.0	0.0	3.0
5	3.5	1.0	.3	13.0	0.0	0.0	3.0
6	4.9	1.0	.2	22.0	0.0	0.0	1.0
7	4.2	1.0	.3	17.0	0.0	0.0	2.0
8	3.8	1.0	.3	16.0	0.0	0.0	2.0
9	4.6	0.0	.4	19.0	0.0	0.0	1.0
10	4.2	1.0	.2	8.0	0.0	0.0	1.0
11	3.9	0.0	.2	11.0	0.0	0.0	1.0
12	4.2	1.0	.3	19.0	0.0	0.0	1.0
13	4.3	1.0	.2	13.0	0.0	0.0	2.0
14	4.3	0.0	.2	12.0	0.0	0.0	2.0
15	4.4	0.0	.3	17.0	0.0	1.0	2.0
16	4.3	1.0	.3	19.0	0.0	0.0	2.0
17	4.6	1.0	.2	17.0	0.0	0.0	1.0
18	4.1	1.0	.2	20.0	0.0	0.0	1.0
19	4.7	1.0	.2	10.0	0.0	0.0	1.0
20	4.6	0.0	.2	18.0	0.0	0.0	1.0
MEAN	4.3	1.0	.3	16.0	0.0	0.0	1.6
STD DEV	.4	1.0	.1	4.1	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 31 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.5	0.0	.1	7.0	0.0	0.0	1.0
2	3.9	0.0	.2	17.0	0.0	0.0	2.0
3	4.7	0.0	.2	19.5	0.0	0.0	2.0
4	4.9	0.0	.3	18.0	0.0	0.0	1.0
5	3.9	0.0	.2	22.5	0.0	0.0	20.0
6	3.9	0.0	.2	11.5	0.0	0.0	1.0
7	3.9	0.0	.2	13.5	0.0	0.0	2.0
8	4.9	0.0	.3	23.5	0.0	0.0	1.0
9	4.8	0.0	.3	15.5	0.0	0.0	3.0
10	4.5	0.0	.2	16.0	0.0	0.0	3.0
11	4.9	0.0	.3	17.5	0.0	0.0	1.0
12	4.9	0.0	.2	20.0	0.0	0.0	2.0
13	4.9	0.0	.2	13.5	0.0	0.0	2.0
14	4.9	0.0	.2	18.0	0.0	0.0	3.0
15	4.9	0.0	.2	16.0	0.0	0.0	1.0
16	4.5	0.0	.2	14.5	0.0	0.0	1.0
17	4.9	0.0	.3	13.5	0.0	0.0	1.0
18	4.9	0.0	.2	9.0	0.0	0.0	1.0
19	4.2	0.0	.2	9.0	0.0	0.0	1.0
20	3.1	0.0	.2	8.0	0.0	0.0	1.0
MEAN	4.5	0.0	.2	15.2	0.0	0.0	2.5
STD DEV	.5	0.0	.1	4.6	0.0	0.0	4.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 23 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.9	0.0	.3	21.5	0.0	0.0	2.0
2	5.8	0.0	.3	25.0	0.0	0.0	1.0
3	4.5	0.0	.2	19.5	0.0	0.0	1.0
4	5.2	0.0	.3	23.0	0.0	0.0	2.0
5	4.8	0.0	.2	16.0	0.0	0.0	1.0
6	5.2	0.0	.2	15.0	0.0	0.0	1.0
7	5.2	0.0	.3	18.0	0.0	0.0	1.0
8	5.3	0.0	.2	19.0	0.0	0.0	2.0
9	4.9	0.0	.2	15.0	0.0	0.0	2.0
10	5.5	0.0	.3	16.0	0.0	0.0	1.0
11	5.9	0.0	.3	19.0	0.0	0.0	2.0
12	5.9	0.0	.3	19.0	0.0	0.0	1.0
13	5.1	0.0	.2	16.0	0.0	0.0	1.0
14	5.2	0.0	.2	19.0	0.0	0.0	1.0
15	4.4	0.0	.2	17.5	0.0	0.0	1.0
16	5.9	0.0	.4	26.0	0.0	0.0	1.0
17	5.9	0.0	.3	21.5	0.0	0.0	1.0
18	5.9	0.0	.2	16.0	0.0	0.0	1.0
19	4.9	0.0	.2	15.0	0.0	0.0	2.0
20	5.3	0.0	.3	19.0	0.0	0.0	2.0
MEAN	5.3	0.0	.3	18.8	0.0	0.0	1.4
STD DEV	.5	0.0	.1	3.2	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.9	0.0	.3	22.0	0.0	0.0	0.0
2	4.9	0.0	.3	22.9	0.0	0.0	0.0
3	3.9	0.0	.2	16.1	0.0	0.0	0.0
4	5.7	0.0	.3	20.6	0.0	0.0	0.0
5	4.7	0.0	.3	21.4	0.0	0.0	0.0
6	4.8	0.0	.3	13.6	0.0	0.0	0.0
7	4.4	0.0	.3	12.2	0.0	0.0	0.0
8	5.1	0.0	.2	8.9	0.0	0.0	0.0
9	5.0	0.0	.3	21.9	0.0	0.0	0.0
10	4.7	0.0	.2	13.5	0.0	0.0	0.0
11	4.7	0.0	.3	14.5	0.0	0.0	0.0
12	4.5	0.0	.3	17.2	0.0	0.0	0.0
13	4.8	0.0	.3	15.1	0.0	0.0	0.0
14	4.2	0.0	.3	15.9	0.0	0.0	0.0
15	4.9	0.0	.3	19.7	0.0	0.0	0.0
16	4.2	0.0	.3	18.9	0.0	0.0	0.0
17	4.9	0.0	.3	16.6	0.0	0.0	0.0
18	4.9	0.0	.3	20.2	0.0	0.0	0.0
19	4.4	0.0	.3	21.2	0.0	0.0	0.0
20	4.8	0.0	.3	14.9	0.0	0.0	0.0
MEAN	4.7	0.0	.3	17.4	0.0	0.0	0.0
STD DEV	.4	0.0	.0	3.8	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 19 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT	

1	5.9	0.0	.3	20.0	0.0	0.0	9.0	5 EMPTY QUADRATS
2	5.9	0.0	.3	18.5	0.0	0.0	3.0	
3	5.7	0.0	.3	18.5	0.0	0.0	2.0	
4	5.7	0.0	.2	19.0	0.0	0.0	3.0	6TH
5	4.9	0.0	.2	18.0	0.0	0.0	9.0	
6	4.1	0.0	.1	10.7	0.0	0.0	1.0	
7	4.8	0.0	.2	16.7	0.0	0.0	2.0	
8	5.8	0.0	.2	18.5	0.0	0.0	2.0	
9	5.1	0.0	.2	19.2	0.0	0.0	4.0	7TH
10	5.9	0.0	.2	17.8	0.0	0.0	1.0	
11	5.2	0.0	.3	19.8	0.0	0.0	1.0	
12	4.7	0.0	.2	11.0	0.0	0.0	1.0	
13	4.9	0.0	.3	20.3	0.0	0.0	5.0	8TH
14	5.9	0.0	.2	13.2	0.0	0.0	2.0	
15	5.2	0.0	.2	19.3	0.0	0.0	3.0	
16	5.9	0.0	.2	15.5	0.0	0.0	2.0	
17	4.9	0.0	.2	13.6	0.0	0.0	1.0	
18	5.9	0.0	.2	16.2	0.0	0.0	3.0	
19	5.3	0.0	.2	15.5	0.0	0.0	1.0	
20	5.8	0.0	.2	18.3	0.0	0.0	6.0	PLUS 7
MEAN	5.4	0.0	.2	17.0	0.0	0.0	3.1	
STD DEV	.5	0.0	.0	2.9	0.0	0.0	2.5	

0.0 = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA DEMER

DATE 2 JULY 1990

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.8	0.0	.3	14.2	0.0	0.0	1.0
2	4.7	0.0	.3	13.5	0.0	0.0	1.0
3	5.8	0.0	.3	13.9	0.0	0.0	2.0
4	4.9	0.0	.3	14.5	0.0	0.0	2.0
5	4.1	0.0	.2	14.7	0.0	0.0	1.0
6	5.8	0.0	.2	16.8	0.0	0.0	2.0
7	4.7	0.0	.2	13.2	0.0	0.0	1.0
8	4.5	0.0	.2	13.3	0.0	0.0	1.0
9	4.7	0.0	.2	19.1	0.0	0.0	1.0
10	4.9	0.0	.2	13.0	0.0	0.0	1.0
11	4.8	0.0	.3	13.5	0.0	0.0	3.0
12	5.8	0.0	.3	16.2	0.0	0.0	3.0
13	5.9	0.0	.3	17.3	0.0	0.0	2.0
14	4.7	0.0	.2	10.9	0.0	0.0	1.0
15	5.7	0.0	.2	18.8	0.0	0.0	1.0
16	4.9	0.0	.2	13.6	0.0	0.0	1.0
17	4.8	0.0	.2	17.1	0.0	0.0	1.0
18	4.5	0.0	.2	14.1	0.0	0.0	1.0
19	5.9	0.0	.3	17.1	0.0	0.0	2.0
20	4.6	0.0	.2	23.1	0.0	0.0	1.0
MEAN	5.0	0.0	.2	15.4	0.0	0.0	1.5
STD DEV	.6	0.0	.1	2.8	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	5.8	0.0	.2	20.6	0.0	0.0	3.0
2	6.3	0.0	.2	17.6	0.0	0.0	2.0
3	5.9	0.0	.2	19.9	0.0	0.0	2.0
4	5.7	0.0	.2	16.5	0.0	0.0	2.0
5	5.8	0.0	.2	19.9	0.0	0.0	1.0
6	6.3	0.0	.1	13.2	0.0	0.0	1.0
7	5.9	0.0	.2	17.1	0.0	0.0	1.0
8	6.2	0.0	.1	14.3	0.0	0.0	1.0
9	6.6	0.0	.1	14.8	0.0	0.0	1.0
10	6.5	0.0	.1	13.2	0.0	0.0	1.0
11	6.4	0.0	.2	16.7	0.0	0.0	1.0
12	6.7	0.0	.1	14.1	0.0	0.0	1.0
13	6.6	0.0	.1	11.5	0.0	0.0	1.0
14	6.7	0.0	.1	14.2	0.0	0.0	1.0
15	6.3	0.0	.1	15.6	0.0	0.0	2.0
16	6.6	0.0	.2	16.4	0.0	0.0	2.0
17	5.9	0.0	.3	25.3	0.0	0.0	1.0
18	6.1	0.0	.2	28.6	0.0	0.0	1.0
19	6.0	0.0	.2	15.8	0.0	0.0	1.0
20	6.6	0.0	.1	13.9	0.0	0.0	2.0
MEAN	6.2	0.0	.2	17.0	0.0	0.0	1.4
STD DEV	.3	0.0	.1	4.2	0.0	0.0	.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.2	0.0	.3	28.2	0.0	0.0	1.0
2	6.5	0.0	.3	23.7	0.0	0.0	2.0
3	6.7	0.0	.3	12.2	0.0	0.0	1.0
4	6.7	0.0	.3	15.1	0.0	0.0	1.0
5	6.8	0.0	.2	15.5	0.0	0.0	2.0
6	6.6	0.0	.3	13.6	0.0	0.0	3.0
7	6.5	0.0	.3	17.0	0.0	0.0	2.0
8	6.5	0.0	.2	16.4	0.0	0.0	4.0
9	6.6	0.0	.3	20.4	0.0	0.0	4.0
10	6.7	0.0	.3	19.6	0.0	0.0	2.0
11	6.7	0.0	.3	22.0	0.0	0.0	3.0
12	6.8	0.0	.3	21.8	0.0	0.0	5.0
13	6.6	0.0	.3	27.8	0.0	0.0	1.0
14	6.6	0.0	.3	24.0	0.0	0.0	1.0
15	6.7	0.0	.3	20.9	0.0	0.0	1.0
16	6.7	16.4	.3	27.2	35.0	4.0	2.0
17	6.8	0.0	.3	15.1	0.0	0.0	2.0
18	6.7	0.0	.3	27.6	0.0	0.0	1.0
19	6.8	0.0	.3	27.2	0.0	0.0	2.0
20	6.7	0.0	.3	21.5	0.0	0.0	2.0
MEAN	6.6	16.4	.3	20.8	35.0	4.0	2.1
STD DEV	.1	0.0	.0	5.2	0.0	0.0	1.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 21 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.9	0.0	.1	17.2	0.0	0.0	2.0
2	6.9	0.0	.1	13.4	0.0	0.0	1.0
3	6.9	0.0	.2	16.6	0.0	0.0	1.0
4	6.9	0.0	.2	20.2	0.0	0.0	7.0
5	6.9	0.0	.1	16.9	0.0	0.0	3.0
6	6.9	0.0	.2	15.7	0.0	0.0	3.0
7	6.8	0.0	.2	19.4	0.0	0.0	1.0
8	6.9	0.0	.1	12.8	0.0	0.0	2.0
9	6.9	0.0	.2	19.6	0.0	0.0	4.0
10	6.8	0.0	.1	17.2	0.0	0.0	2.0
11	6.9	0.0	.1	12.9	0.0	0.0	5.0
12	6.8	0.0	.1	13.3	0.0	0.0	2.0
13	6.9	0.0	.2	21.3	0.0	0.0	1.0
14	6.9	0.0	.2	24.6	0.0	0.0	2.0
15	6.9	0.0	.2	16.3	0.0	0.0	1.0
16	6.9	0.0	.1	17.0	0.0	0.0	2.0
17	6.9	0.0	.1	15.1	0.0	0.0	2.0
18	6.9	0.0	.2	18.8	0.0	0.0	2.0
19	6.9	0.0	.1	19.3	0.0	0.0	3.0
20	6.7	0.0	.2	17.2	0.0	0.0	1.0
MEAN	6.9	0.0	.2	17.2	0.0	0.0	2.4
STD DEV	.1	0.0	.1	3.0	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 6 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.8	0.0	.3	19.2	0.0	0.0	1.0
2	6.9	0.0	.3	15.3	0.0	0.0	2.0
3	6.8	0.0	.3	21.0	0.0	0.0	1.0
4	6.8	0.0	.3	27.1	0.0	0.0	1.0
5	6.8	0.0	.3	22.2	0.0	0.0	3.0
6	6.7	0.0	.2	9.1	0.0	0.0	1.0
7	6.8	0.0	.2	8.5	0.0	0.0	1.0
8	6.9	0.0	.3	11.6	0.0	0.0	2.0
9	6.9	0.0	.2	7.8	0.0	0.0	2.0
10	6.9	0.0	.2	11.4	0.0	0.0	1.0
11	6.8	0.0	.3	14.5	0.0	0.0	1.0
12	6.8	0.0	.3	19.5	0.0	0.0	1.0
13	6.8	0.0	.3	21.4	0.0	0.0	1.0
14	6.9	0.0	.2	11.0	0.0	0.0	1.0
15	6.7	0.0	.2	10.6	0.0	0.0	2.0
16	6.8	0.0	.2	7.2	0.0	0.0	1.0
17	6.9	0.0	.3	19.0	0.0	0.0	1.0
18	6.9	0.0	.2	9.5	0.0	0.0	1.0
19	6.8	0.0	.3	16.2	0.0	0.0	2.0
20	6.9	0.0	.2	12.0	0.0	0.0	1.0
MEAN	6.8	0.0	.3	14.7	0.0	0.0	1.4
STD DEV	.1	0.0	.1	5.7	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DEMER

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NOS. VEG. PLANT

1	6.7	0.0	.3	17.5	0.0	0.0	2.0
2	8.0	0.0	.3	20.0	0.0	0.0	1.0
3	7.0	0.0	.2	3.0	0.0	0.0	1.0
4	6.8	0.0	.2	24.2	0.0	0.0	1.0
5	7.2	0.0	.2	9.7	0.0	0.0	2.0
6	7.4	0.0	.3	11.1	0.0	0.0	2.0
7	6.7	0.0	.2	17.7	0.0	0.0	1.0
8	6.7	0.0	.3	19.3	0.0	0.0	2.0
9	7.2	0.0	.2	4.4	0.0	0.0	2.0
10	6.7	0.0	.3	16.1	0.0	0.0	4.0
11	6.7	0.0	.3	18.1	0.0	0.0	1.0
12	6.8	0.0	.3	18.4	0.0	0.0	1.0
13	6.9	0.0	.3	19.0	0.0	0.0	1.0
14	6.8	0.0	.3	17.5	0.0	0.0	2.0
15	7.4	0.0	.3	12.8	0.0	0.0	3.0
16	6.8	0.0	.3	20.1	0.0	0.0	2.0
17	6.9	0.0	.3	14.0	0.0	0.0	2.0
18	6.8	0.0	.3	20.2	0.0	0.0	4.0
19	6.8	0.0	.3	19.0	0.0	0.0	3.0
20	6.7	0.0	.3	18.0	0.0	0.0	2.0
MEAN	6.9	0.0	.3	16.0	0.0	0.0	2.0
STD DEV	.3	0.0	.0	5.4	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 27 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	1.0	0.0	0.0	0.0	0.0	0.0	1.0
2	1.0	0.0	0.0	0.0	0.0	0.0	2.0
3	1.0	0.0	0.0	0.0	0.0	0.0	2.0
4	1.0	0.0	0.0	0.0	0.0	0.0	1.0
5	1.0	0.0	0.0	0.0	0.0	0.0	1.0
6	1.2	0.0	0.0	0.0	0.0	0.0	2.0
7	1.0	0.0	0.0	0.0	0.0	0.0	1.0
8	1.0	0.0	0.0	0.0	0.0	0.0	1.0
9	1.0	0.0	0.0	0.0	0.0	0.0	3.0
10	1.0	0.0	0.0	0.0	0.0	0.0	1.0
11	1.0	0.0	0.0	0.0	0.0	0.0	1.0
12	1.0	0.0	0.0	0.0	0.0	0.0	3.0
13	1.0	0.0	0.0	0.0	0.0	0.0	1.0
14	1.0	0.0	0.0	0.0	0.0	0.0	1.0
15	1.0	0.0	0.0	0.0	0.0	0.0	3.0
16	1.0	0.0	0.0	0.0	0.0	0.0	3.0
17	1.0	0.0	0.0	0.0	0.0	0.0	1.0
18	1.0	0.0	0.0	0.0	0.0	0.0	1.0
19	1.0	0.0	0.0	0.0	0.0	0.0	5.0
20	2.1	0.0	0.0	0.0	0.0	0.0	4.0
MEAN	1.1	0.0	0.0	0.0	0.0	0.0	1.9
STD DEV	.2	0.0	0.0	0.0	0.0	0.0	1.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.1	0.0	.1	10.1	0.0	0.0	2.0
2	3.2	0.0	.1	7.2	0.0	0.0	3.0
3	3.3	0.0	.1	8.1	0.0	0.0	3.0
4	3.1	0.0	.1	8.6	0.0	0.0	5.0
5	3.1	0.0	.1	6.1	0.0	0.0	1.0
6	3.0	0.0	.1	3.5	0.0	0.0	1.0
7	3.1	0.0	.1	6.1	0.0	0.0	5.0
8	3.3	0.0	.1	9.0	0.0	0.0	8.0
9	3.2	0.0	.1	9.1	0.0	0.0	2.0
10	2.8	0.0	.1	7.8	0.0	0.0	1.0
11	3.1	0.0	.1	7.9	0.0	0.0	1.0
12	3.3	0.0	.1	6.5	0.0	0.0	1.0
13	3.4	0.0	.1	4.9	0.0	0.0	1.0
14	3.4	0.0	.1	6.3	0.0	0.0	1.0
15	3.2	0.0	.1	4.6	0.0	0.0	1.0
16	3.1	0.0	.1	8.0	0.0	0.0	1.0
17	3.2	0.0	.1	5.6	0.0	0.0	1.0
18	3.3	0.0	.1	9.5	0.0	0.0	1.0
19	3.3	0.0	.1	7.2	0.0	0.0	1.0
20	3.5	0.0	.1	12.8	0.0	0.0	1.0
MEAN	3.2	0.0	.1	7.4	0.0	0.0	2.1
STD DEV	.2	0.0	.0	2.1	0.0	0.0	1.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 21 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.5	0.0	.1	8.5	0.0	0.0	1.0
2	4.0	0.0	.1	7.8	0.0	0.0	2.0
3	4.3	0.0	.1	7.6	0.0	0.0	1.0
4	4.4	0.0	.1	9.1	0.0	0.0	1.0
5	4.5	0.0	.2	12.3	0.0	0.0	2.0
6	4.3	0.0	.1	7.1	0.0	0.0	1.0
7	4.6	0.0	.2	10.4	0.0	0.0	1.0
8	4.5	0.0	.1	9.9	0.0	0.0	1.0
9	4.3	0.0	.1	10.2	0.0	0.0	1.0
10	4.4	0.0	.1	5.6	0.0	0.0	1.0
11	4.0	0.0	.1	7.7	0.0	0.0	1.0
12	4.4	0.0	.2	12.9	0.0	0.0	4.0
13	4.0	0.0	.1	7.3	0.0	0.0	1.0
14	4.1	0.0	.2	12.3	0.0	0.0	1.0
15	4.3	0.0	.1	9.1	0.0	0.0	1.0
16	3.9	0.0	.1	8.7	0.0	0.0	1.0
17	4.0	0.0	.2	10.1	0.0	0.0	1.0
18	4.1	0.0	.1	9.0	0.0	0.0	1.0
19	4.4	0.0	.2	9.5	0.0	0.0	1.0
20	4.0	0.0	.2	9.1	0.0	0.0	1.0
MEAN	4.3	0.0	.1	9.2	0.0	0.0	1.3
STD DEV	.2	0.0	.0	1.6	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 3 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	3.9	0.0	.2	12.3	0.0	0.0	1.0	
2	3.8	0.0	.1	14.1	0.0	0.0	1.0	
3	4.7	0.0	.2	19.0	0.0	0.0	1.0	
4	4.5	0.0	.2	13.5	0.0	0.0	2.0	
5	4.6	0.0	.2	12.6	0.0	0.0	2.0	1ST
6	5.1	0.0	.3	23.1	0.0	0.0	1.0	
7	4.2	0.0	.2	10.5	0.0	0.0	1.0	
8	4.6	0.0	.2	21.3	0.0	0.0	2.0	2ND 3RD=0.
9	4.8	0.0	.2	14.9	0.0	0.0	1.0	
10	4.6	0.0	.2	19.5	0.0	0.0	1.0	
11	4.8	0.0	.2	23.1	0.0	0.0	1.0	
12	4.9	0.0	.2	19.0	0.0	0.0	5.0	4TH
13	4.5	0.0	.2	13.5	0.0	0.0	1.0	
14	4.6	0.0	.2	14.2	0.0	0.0	1.0	
15	4.7	0.0	.2	17.6	0.0	0.0	1.0	
16	5.1	0.0	.2	16.1	0.0	0.0	5.0	
17	4.6	0.0	.2	21.6	0.0	0.0	1.0	5TH
18	4.9	0.0	.1	18.2	0.0	0.0	1.0	
19	4.8	0.0	.1	13.0	0.0	0.0	1.0	
20	4.9	0.0	.2	17.8	0.0	0.0	3.0	
MEAN	4.6	0.0	.2	16.7	0.0	0.0	1.7	
STD DEV	.3	0.0	.0	3.8	0.0	0.0	1.3	

0.0 = NOT RECORDED

AGPOPYRON SMITHII

STUDY AREA FARSON

DATE 17 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	5.2	0.0	.1	14.9	0.0	0.0	1.0	
2	5.7	0.0	.1	16.5	0.0	0.0	3.0	
3	5.3	0.0	.1	8.3	0.0	0.0	2.0	1ST
4	5.1	0.0	.1	13.9	0.0	0.0	2.0	2ND
5	5.1	0.0	.1	7.4	0.0	0.0	2.0	
6	5.5	0.0	.2	16.6	0.0	0.0	1.0	3RD
7	5.6	0.0	.1	13.7	0.0	0.0	1.0	
8	4.9	0.0	.1	12.8	0.0	0.0	4.0	4TH
9	5.8	0.0	.2	15.1	0.0	0.0	1.0	
10	5.5	0.0	.1	10.6	0.0	0.0	2.0	
11	5.7	0.0	.2	15.4	0.0	0.0	8.0	5TH, 6TH EMPTY
12	4.9	0.0	.1	7.6	0.0	0.0	1.0	7TH
13	5.5	0.0	.1	13.4	0.0	0.0	3.0	8TH, 9TH, 10TH EMPTY
14	5.8	0.0	.2	25.5	0.0	0.0	1.0	
15	5.3	0.0	.1	13.2	0.0	0.0	4.0	11TH
16	5.2	0.0	.2	15.5	0.0	0.0	3.0	12TH
17	5.6	0.0	.2	15.4	0.0	0.0	1.0	
18	5.4	0.0	.2	16.4	0.0	0.0	2.0	
19	5.5	0.0	.1	12.3	0.0	0.0	4.0	13TH, 14TH EMPTY
20	5.8	0.0	.2	17.9	0.0	0.0	4.0	15TH
MEAN	5.4	0.0	.1	14.2	0.0	0.0	2.5	
STD DEV	.3	0.0	.1	4.1	0.0	0.0	1.7	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	5.5	0.0	.2	12.3	0.0	0.0	1.0
2	5.5	0.0	.1	10.6	0.0	0.0	2.0
3	5.4	0.0	.1	9.5	0.0	0.0	2.0
4	5.1	0.0	.1	11.6	0.0	0.0	1.0
5	6.1	0.0	.2	22.5	0.0	0.0	1.0
6	5.7	0.0	.2	12.8	0.0	0.0	3.0
7	5.8	0.0	.2	17.8	0.0	0.0	7.0
8	5.8	0.0	.1	16.1	0.0	0.0	2.0
9	5.7	0.0	.1	12.8	0.0	0.0	1.0
10	5.8	0.0	.2	26.4	0.0	0.0	2.0
11	5.9	0.0	.2	13.1	0.0	0.0	1.0
12	5.9	0.0	.2	12.6	0.0	0.0	1.0
13	5.7	0.0	.2	9.7	0.0	0.0	1.0
14	5.9	0.0	.1	12.8	0.0	0.0	1.0
15	5.9	0.0	.1	16.2	0.0	0.0	1.0
16	5.9	0.0	.2	15.9	0.0	0.0	7.0
17	5.9	0.0	.2	17.1	0.0	0.0	8.0
18	5.8	0.0	.2	17.9	0.0	0.0	4.0
19	5.8	0.0	.2	12.1	0.0	0.0	1.0
20	5.7	0.0	.2	12.2	0.0	0.0	3.0
MEAN	5.7	0.0	.2	14.6	0.0	0.0	2.5
STD DEV	.2	0.0	.0	4.3	0.0	0.0	2.3

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 15 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	MAX. REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	5.6	0.0	.2	17.4	0.0	0.0	0.0	1.0
2	6.0	0.0	.2	20.7	0.0	0.0	0.0	3.0
3	6.0	0.0	.2	17.8	0.0	0.0	0.0	2.0
4	5.8	0.0	.1	10.9	0.0	0.0	0.0	1.0
5	5.9	0.0	.2	18.6	0.0	0.0	0.0	2.0
6	5.9	0.0	.2	16.1	0.0	0.0	0.0	1.0
7	5.9	0.0	.1	19.4	0.0	0.0	0.0	1.0
8	5.8	0.0	.2	16.2	0.0	0.0	0.0	1.0
9	5.7	0.0	.2	16.8	0.0	0.0	0.0	6.0
10	5.9	0.0	.2	20.6	0.0	0.0	0.0	5.0
11	5.7	0.0	.1	16.1	0.0	0.0	0.0	1.0
12	5.9	0.0	.2	11.7	0.0	0.0	0.0	1.0
13	6.0	0.0	.2	20.5	0.0	0.0	0.0	1.0
14	6.1	0.0	.2	23.6	0.0	0.0	0.0	1.0
15	5.4	0.0	.1	28.2	0.0	0.0	0.0	2.0
16	6.1	0.0	.2	33.5	0.0	0.0	0.0	2.0
17	5.9	0.0	.1	15.6	0.0	0.0	0.0	1.0
18	6.0	0.0	.2	20.9	0.0	0.0	0.0	1.0
19	5.9	0.0	.2	21.6	0.0	0.0	0.0	1.0
20	5.9	0.0	.2	24.6	0.0	0.0	0.0	4.0
MEAN	5.9	0.0	.2	19.5	0.0	0.0	0.0	1.9
STD DEV	.2	0.0	.0	5.3	0.0	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.1	0.0	.2	17.2	0.0	0.0	1.0
2	6.3	0.0	.1	20.6	0.0	0.0	1.0
3	6.1	0.0	.1	17.8	0.0	0.0	1.0
4	6.2	0.0	.1	15.2	0.0	0.0	3.0
5	6.0	0.0	.2	19.3	0.0	0.0	1.0
6	6.2	0.0	.2	19.8	0.0	0.0	1.0
7	6.0	0.0	.2	18.4	0.0	0.0	6.0
8	6.1	0.0	.1	19.5	0.0	0.0	1.0
9	6.0	0.0	.1	16.6	0.0	0.0	3.0
10	6.1	0.0	.1	23.1	0.0	0.0	2.0
11	6.1	0.0	.1	20.2	0.0	0.0	1.0
12	6.0	0.0	.1	18.0	0.0	0.0	2.0
13	6.1	0.0	.2	18.1	0.0	0.0	5.0
14	6.2	0.0	.2	18.8	0.0	0.0	1.0
15	6.2	0.0	.1	16.3	0.0	0.0	1.0
16	6.0	0.0	.1	18.7	0.0	0.0	1.0
17	6.0	0.0	.2	19.7	0.0	0.0	7.0
18	6.2	0.0	.2	19.5	0.0	0.0	1.0
19	6.3	0.0	.1	15.0	0.0	0.0	2.0
20	6.0	0.0	.1	23.6	0.0	0.0	3.0
MEAN	6.1	0.0	.1	18.8	0.0	0.0	2.2
STD DEV	.1	0.0	.1	2.2	0.0	0.0	1.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 13 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.3	0.0	.1	12.6	0.0	0.0	2.0
2	6.5	0.0	.1	15.3	0.0	0.0	1.0
3	6.3	0.0	.2	11.4	0.0	0.0	1.0
4	6.7	0.0	.1	12.5	0.0	0.0	5.0
5	6.2	0.0	.1	9.3	0.0	0.0	1.0
6	6.3	0.0	.1	12.6	0.0	0.0	9.0
7	6.5	0.0	.1	12.8	0.0	0.0	6.0
8	6.4	0.0	.2	15.7	0.0	0.0	3.0
9	6.3	0.0	.1	16.3	0.0	0.0	2.0
10	6.4	0.0	.1	12.4	0.0	0.0	2.0
11	6.4	0.0	.2	11.1	0.0	0.0	1.0
12	6.3	0.0	.1	10.2	0.0	0.0	1.0
13	6.2	0.0	.1	10.7	0.0	0.0	1.0
14	6.3	0.0	.1	10.6	0.0	0.0	1.0
15	6.4	0.0	.1	12.5	0.0	0.0	3.0
16	6.8	0.0	.1	10.1	0.0	0.0	1.0
17	6.5	0.0	.2	13.3	0.0	0.0	4.0
18	6.5	0.0	.1	14.7	0.0	0.0	1.0
19	6.3	0.0	.2	23.0	0.0	0.0	4.0
20	6.4	0.0	.2	25.4	0.0	0.0	4.0
MEAN	6.4	0.0	.1	13.6	0.0	0.0	2.7
STD DEV	.2	0.0	.0	4.1	0.0	0.0	2.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 31 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.3	0.0	.1	14.5	0.0	0.0	5.0
2	6.0	0.0	.1	11.5	0.0	0.0	1.0
3	6.6	0.0	.1	13.5	0.0	0.0	3.0
4	6.5	0.0	.1	14.3	0.0	0.0	1.0
5	6.5	0.0	.1	21.6	0.0	0.0	3.0
6	6.5	0.0	.1	15.8	0.0	0.0	1.0
7	6.3	0.0	.1	10.5	0.0	0.0	2.0
8	6.3	0.0	.1	14.0	0.0	0.0	4.0
9	6.7	0.0	.1	13.5	0.0	0.0	1.0
10	6.6	0.0	.1	14.0	0.0	0.0	1.0
11	6.3	0.0	.2	22.8	0.0	0.0	1.0
12	6.7	0.0	.1	15.0	0.0	0.0	2.0
13	6.4	0.0	.2	23.8	0.0	0.0	1.0
14	6.1	0.0	.1	20.3	0.0	0.0	1.0
15	6.4	0.0	.1	19.0	0.0	0.0	2.0
16	6.3	0.0	.1	14.0	0.0	0.0	1.0
17	6.3	0.0	.1	19.8	0.0	0.0	1.0
18	6.4	0.0	.1	15.0	0.0	0.0	1.0
19	6.4	0.0	.1	16.0	0.0	0.0	2.0
20	6.4	0.0	.1	16.3	0.0	0.0	1.0
MEAN	6.4	0.0	.1	16.3	0.0	0.0	1.8
STD DEV	.2	0.0	.0	3.7	0.0	0.0	1.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA FARSON

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.5	0.0	.1	13.5	0.0	0.0	3.0
2	6.6	0.0	.2	10.0	0.0	0.0	3.0
3	6.7	0.0	.1	12.7	0.0	0.0	2.0
4	6.8	0.0	.1	8.5	0.0	0.0	1.0
5	6.9	0.0	.1	12.0	0.0	0.0	1.0
6	6.7	0.0	.1	8.5	0.0	0.0	1.0
7	6.5	0.0	.1	14.3	0.0	0.0	4.0
8	6.7	0.0	.1	15.2	0.0	0.0	1.0
9	6.4	0.0	.2	22.0	0.0	0.0	2.0
10	6.4	0.0	.2	14.3	0.0	0.0	1.0
11	6.6	0.0	.2	12.5	0.0	0.0	1.0
12	6.9	0.0	.1	13.5	0.0	0.0	1.0
13	6.5	0.0	.2	14.5	0.0	0.0	1.0
14	6.4	0.0	.2	18.5	0.0	0.0	1.0
15	6.4	0.0	.2	19.0	0.0	0.0	8.0
16	6.4	0.0	.2	22.6	0.0	0.0	2.0
17	6.5	0.0	.1	15.4	0.0	0.0	4.0
18	6.6	0.0	.1	16.1	0.0	0.0	1.0
19	6.7	0.0	.1	16.1	0.0	0.0	1.0
20	6.7	0.0	.1	13.5	0.0	0.0	1.0
MEAN	6.6	0.0	.1	14.6	0.0	0.0	2.0
STD DEV	.2	0.0	.1	3.8	0.0	0.0	1.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CK.

DATE 13 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.2	0.0	.1	4.3	0.0	0.0	1.0
2	3.2	0.0	.2	6.8	0.0	0.0	1.0
3	3.0	0.0	.2	3.5	0.0	0.0	1.0
4	2.8	0.0	.1	3.1	0.0	0.0	1.0
5	3.1	0.0	.2	6.7	0.0	0.0	1.0
6	3.6	0.0	.2	4.5	0.0	0.0	2.0
7	3.4	0.0	.2	4.8	0.0	0.0	2.0
8	2.9	0.0	.2	6.0	0.0	0.0	2.0
9	3.3	0.0	.2	5.9	0.0	0.0	2.0
10	2.9	0.0	.2	5.4	0.0	0.0	2.0
11	3.5	0.0	.2	4.7	0.0	0.0	4.0
12	3.6	0.0	.2	4.0	0.0	0.0	4.0
13	3.5	0.0	.2	3.1	0.0	0.0	4.0
14	3.7	0.0	.2	5.5	0.0	0.0	4.0
15	3.8	0.0	.2	4.2	0.0	0.0	1.0
16	3.5	0.0	.2	6.0	0.0	0.0	2.0
17	3.9	0.0	.2	8.8	0.0	0.0	2.0
18	3.8	0.0	.2	6.1	0.0	0.0	1.0
19	3.4	0.0	.3	7.6	0.0	0.0	1.0
20	3.3	0.0	.2	6.2	0.0	0.0	1.0
MEAN	3.4	0.0	.2	5.4	0.0	0.0	2.0
STD DEV	.3	0.0	.0	1.5	0.0	0.0	1.1

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CK.

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NJS. SPK/ CULM	NJS. VEG. PLANT
1	3.8	0.0	.2	8.0	0.0	0.0	1.0
2	3.9	0.0	.2	9.0	0.0	0.0	1.0
3	4.4	0.0	.2	13.0	0.0	0.0	1.0
4	3.7	0.0	.2	10.0	0.0	0.0	1.0
5	4.3	0.0	.2	9.0	0.0	0.0	1.0
6	3.9	0.0	.2	10.0	0.0	0.0	2.0
7	4.3	0.0	.3	15.0	0.0	0.0	2.0
8	3.7	0.0	.2	8.0	0.0	0.0	1.0
9	3.6	0.0	.1	6.0	0.0	0.0	1.0
10	2.7	0.0	.2	7.0	0.0	0.0	1.0
11	3.5	0.0	.2	9.0	0.0	0.0	1.0
12	3.5	0.0	.2	13.0	0.0	0.0	1.0
13	3.9	0.0	.2	12.0	0.0	0.0	1.0
14	4.0	0.0	.2	10.0	0.0	0.0	1.0
15	3.4	0.0	.2	10.0	0.0	0.0	1.0
16	3.8	0.0	.2	9.0	0.0	0.0	1.0
17	3.9	0.0	.2	10.0	0.0	0.0	1.0
18	3.8	0.0	.2	8.0	0.0	0.0	1.0
19	2.8	0.0	.2	7.0	0.0	0.0	2.0
20	4.6	0.0	.3	12.0	0.0	0.0	2.0
MEAN	3.8	0.0	.2	9.8	0.0	0.0	1.2
STD DEV	.4	0.0	.0	2.3	0.0	0.0	.4

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CK.

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	3.9	1.0	.2	14.5	0.0	0.0	2.0
2	4.1	1.0	.2	9.0	0.0	0.0	2.0
3	3.9	1.0	.1	8.5	0.0	0.0	1.0
4	4.3	1.0	.2	7.5	0.0	0.0	1.0
5	4.2	1.0	.3	14.5	0.0	0.0	2.0
6	3.9	1.0	.2	8.5	0.0	0.0	2.0
7	3.7	1.0	.3	9.0	0.0	0.0	2.0
8	3.8	1.0	.2	12.0	0.0	0.0	2.0
9	4.1	1.0	.2	12.5	0.0	0.0	1.0
10	3.9	0.0	.2	9.0	0.0	0.0	1.0
11	3.9	1.0	.2	12.0	0.0	0.0	1.0
12	3.9	0.0	.2	8.5	0.0	0.0	1.0
13	4.3	1.0	.3	13.5	0.0	0.0	1.0
14	4.3	0.0	.3	13.0	0.0	0.0	2.0
15	4.2	1.0	.2	10.0	0.0	0.0	1.0
16	4.2	1.0	.3	12.5	0.0	0.0	2.0
17	4.4	0.0	.3	12.0	0.0	0.0	2.0
18	4.5	1.0	.3	10.0	0.0	0.0	3.0
19	3.6	1.0	.3	13.0	0.0	0.0	3.0
20	3.4	1.0	.2	14.0	0.0	0.0	1.0
MEAN	4.0	1.0	.2	11.2	0.0	0.0	1.7
STD DEV	.3	1.0	.1	2.3	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CK.

DATE 24 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT

1	3.7	0.0	.2	14.2	0.0	0.0	1.0
2	4.5	0.0	.2	15.8	0.0	0.0	1.0
3	4.6	0.0	.1	12.2	0.0	0.0	2.0
4	4.5	0.0	.2	18.0	0.0	0.0	2.0
5	4.3	0.0	.2	17.4	0.0	0.0	2.0
6	4.6	0.0	.3	17.2	0.0	0.0	1.0
7	4.4	0.0	.2	14.1	0.0	0.0	1.0
8	4.4	0.0	.1	11.9	0.0	0.0	1.0
9	4.7	0.0	.2	16.8	0.0	0.0	1.0
10	4.5	0.0	.1	12.0	0.0	0.0	1.0
11	4.7	0.0	.2	16.1	0.0	0.0	1.0
12	4.2	0.0	.1	10.3	0.0	0.0	1.0
13	4.1	0.0	.1	14.3	0.0	0.0	1.0
14	4.2	0.0	.1	12.5	0.0	0.0	1.0
15	4.6	0.0	.2	12.9	0.0	0.0	2.0
16	4.3	0.0	.1	13.9	0.0	0.0	2.0
17	4.2	0.0	.1	12.3	0.0	0.0	1.0
18	4.6	0.0	.2	14.1	0.0	0.0	1.0
19	4.5	0.0	.2	21.3	0.0	0.0	1.0
20	4.5	0.0	.2	13.9	0.0	0.0	1.0
MEAN	4.4	0.0	.2	14.6	0.0	0.0	1.3
STD DEV	.2	0.0	.1	2.6	0.0	0.0	.4

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA HORSE CK.

DATE 6 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	5.3	0.0	.2	12.5	0.0	0.0	3.0
2	5.1	0.0	.2	14.5	0.0	0.0	2.0
3	4.9	0.0	.2	9.5	0.0	0.0	1.0
4	5.2	0.0	.2	17.1	0.0	0.0	2.0
5	5.2	0.0	.2	13.5	0.0	0.0	2.0
6	5.6	0.0	.2	15.2	0.0	0.0	2.0
7	5.3	0.0	.2	14.6	0.0	0.0	2.0
8	5.1	0.0	.2	10.6	0.0	0.0	2.0
9	4.9	0.0	.1	12.6	0.0	0.0	2.0
10	5.5	0.0	.2	12.5	0.0	0.0	1.0
11	5.1	0.0	.2	13.1	0.0	0.0	1.0
12	5.0	0.0	.2	13.3	0.0	0.0	1.0
13	5.5	0.0	.2	16.9	0.0	0.0	1.0
14	5.3	0.0	.2	16.1	0.0	0.0	1.0
15	5.7	0.0	.3	17.4	0.0	0.0	1.0
16	5.1	0.0	.2	15.4	0.0	0.0	1.0
17	4.6	0.0	.2	15.5	0.0	0.0	2.0
18	4.9	0.0	.1	10.3	0.0	0.0	2.0
19	5.1	0.0	.2	15.5	0.0	0.0	1.0
20	5.2	0.0	.2	12.5	0.0	0.0	1.0
1ST							
2ND, PLUS 5 GRAZED							
3RD, PLUS 6 GRAZED							
MEAN	5.2	0.0	.2	13.9	0.0	0.0	1.5
STD DEV	.3	0.0	.0	2.3	0.0	0.0	.6

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0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	2.6	0.0	.1	6.5	0.0	0.0	1.0
2	2.5	0.0	.1	8.1	0.0	0.0	1.0
3	2.0	1.0	.1	5.0	0.0	0.0	1.0
4	2.3	0.0	.1	3.1	0.0	0.0	1.0
5	2.3	0.0	.1	3.0	0.0	0.0	1.0
6	2.4	0.0	.1	6.5	0.0	0.0	1.0
7	2.1	0.0	.1	2.9	0.0	0.0	1.0
8	2.3	0.0	.1	4.2	0.0	0.0	1.0
9	2.1	0.0	.1	1.8	0.0	0.0	1.0
10	2.2	0.0	.1	3.2	0.0	0.0	1.0
11	2.3	0.0	.1	4.6	0.0	0.0	1.0
12	2.4	0.0	.1	3.6	0.0	0.0	1.0
13	2.4	0.0	.1	7.5	0.0	0.0	1.0
14	2.3	0.0	.1	6.1	0.0	0.0	1.0
15	2.1	0.0	.1	2.1	0.0	0.0	1.0
16	2.0	0.0	.1	4.1	0.0	0.0	1.0
17	2.0	0.0	.1	.6	0.0	0.0	1.0
18	2.0	0.0	.1	5.0	0.0	0.0	1.0
19	2.1	0.0	.1	1.5	0.0	0.0	1.0
20	2.0	0.0	.1	5.0	0.0	0.0	1.0
MEAN	2.2	0.0	.1	4.2	0.0	0.0	1.0
STD DEV	.2	0.0	.0	2.0	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	3.9	0.0	.1	5.9	0.0	0.0	2.0
2	3.5	0.0	.1	7.6	0.0	0.0	1.0
3	3.9	0.0	.1	8.0	0.0	0.0	1.0
4	3.6	0.0	.1	8.6	0.0	0.0	1.0
5	3.9	0.0	.1	8.1	0.0	0.0	2.0
6	3.1	0.0	.1	10.1	0.0	0.0	2.0
7	3.2	0.0	.1	7.1	0.0	0.0	2.0
8	3.9	0.0	.1	4.0	0.0	0.0	2.0
9	3.8	0.0	.2	8.9	0.0	0.0	1.0
10	3.2	0.0	.1	5.0	0.0	0.0	1.0
11	3.5	0.0	.2	5.6	0.0	0.0	3.0
12	3.5	0.0	.1	6.8	0.0	0.0	5.0
13	3.4	0.0	.1	6.8	0.0	0.0	1.0
14	4.1	0.0	.2	5.6	0.0	0.0	7.0
15	3.3	0.0	.1	5.0	0.0	0.0	2.0
16	3.4	0.0	.1	6.2	0.0	0.0	2.0
17	3.5	0.0	.1	7.5	0.0	0.0	1.0
18	3.3	0.0	.1	7.6	0.0	0.0	3.0
19	3.5	0.0	.1	7.8	0.0	0.0	1.0
20	3.5	0.0	.1	8.0	0.0	0.0	1.0
MEAN	3.6	0.0	.1	7.0	0.0	0.0	2.1
STD DEV	.3	0.0	.0	1.5	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 21 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT

1	3.8	0.0	.2	11.5	0.0	0.0	1.0
2	4.6	0.0	.2	13.0	0.0	0.0	2.0
3	4.4	0.0	.2	17.0	0.0	0.0	3.0
4	4.6	0.0	.2	12.0	0.0	0.0	1.0
5	4.8	0.0	.2	15.5	0.0	0.0	2.0
6	4.2	0.0	.2	13.0	0.0	0.0	3.0
7	3.9	0.0	.2	11.5	0.0	0.0	3.0
8	3.8	0.0	.1	12.5	0.0	0.0	4.0
9	3.9	0.0	.2	12.0	0.0	0.0	3.0
10	3.8	0.0	.2	12.0	0.0	0.0	3.0
11	4.8	0.0	.2	14.0	0.0	0.0	3.0
12	3.7	0.0	.2	11.0	0.0	0.0	6.0
13	3.4	0.0	.2	10.0	0.0	0.0	2.0
14	4.3	0.0	.2	13.0	0.0	0.0	4.0
15	3.6	0.0	.2	13.0	0.0	0.0	3.0
16	4.6	0.0	.2	14.0	0.0	0.0	2.0
17	3.4	0.0	.2	4.5	0.0	0.0	1.0
18	4.2	0.0	.2	12.0	0.0	0.0	3.0
19	3.9	0.0	.3	15.0	0.0	0.0	4.0
20	3.6	0.0	.2	10.0	0.0	0.0	2.0
MEAN	4.1	0.0	.2	12.3	0.0	0.0	2.3
STD DEV	.4	0.0	.0	2.5	0.0	0.0	1.2

DENSITY = 31

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 3 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NOS. VEG. PLANT

1	5.6	1.0	2.5	15.0	0.0	0.0	1.0
2	4.2	1.0	1.0	8.0	0.0	0.0	2.0
3	4.6	0.0	1.5	13.0	0.0	0.0	1.0
4	3.8	1.0	2.0	12.0	0.0	0.0	4.0
5	4.2	1.0	1.5	12.0	0.0	0.0	1.0
6	3.7	1.0	1.0	10.5	0.0	0.0	1.0
7	4.7	0.0	1.5	13.0	0.0	0.0	1.0
8	3.8	1.0	1.0	9.5	0.0	0.0	1.0
9	3.8	1.0	1.5	12.0	0.0	0.0	1.0
10	4.5	1.0	2.0	13.5	0.0	0.0	1.0
11	4.5	1.0	2.0	14.5	0.0	0.0	1.0
12	3.7	1.0	1.0	12.0	0.0	0.0	1.0
13	4.8	0.0	1.5	13.0	0.0	0.0	1.0
14	3.8	0.0	1.0	5.5	0.0	0.0	1.0
15	3.6	1.0	2.5	13.5	0.0	0.0	1.0
16	4.9	1.0	2.5	20.0	0.0	0.0	1.0
17	3.9	1.0	2.0	17.0	0.0	0.0	4.0
18	4.2	1.0	1.5	17.0	0.0	0.0	1.0
19	4.8	1.0	1.5	16.5	0.0	0.0	1.0
20	4.9	1.0	1.5	16.0	0.0	0.0	2.0
MEAN	4.3	1.0	1.6	13.2	0.0	0.0	1.4
STD DEV	.6	1.0	.5	3.3	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 17 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.3	0.0	.2	14.0	0.0	0.0	1.0
2	5.7	0.0	.2	12.0	0.0	0.0	10.0
3	4.8	0.0	.2	8.5	0.0	0.0	30.0
4	5.1	0.0	.2	11.5	0.0	0.0	1.0
5	4.5	0.0	.2	11.0	0.0	0.0	1.0
6	4.9	0.0	.2	10.5	0.0	0.0	1.0
7	4.3	0.0	.1	11.0	0.0	0.0	1.0
8	4.2	0.0	.2	9.5	0.0	0.0	10.0
9	4.2	0.0	.2	9.0	0.0	0.0	3.0
10	4.3	0.0	.2	10.0	0.0	0.0	1.0
11	4.9	0.0	.2	13.5	0.0	0.0	1.0
12	3.9	0.0	.1	9.0	0.0	0.0	3.0
13	4.4	0.0	.2	16.0	0.0	0.0	2.0
14	4.9	0.0	.3	11.0	0.0	0.0	1.0
15	4.7	0.0	.2	13.5	0.0	0.0	10.0
16	4.5	0.0	.2	13.5	0.0	0.0	2.0
17	5.3	0.0	.2	12.5	0.0	0.0	1.0
18	4.8	0.0	.2	14.5	0.0	0.0	1.0
19	4.1	0.0	.2	13.0	0.0	0.0	1.0
20	4.9	0.0	.2	13.0	0.0	0.0	1.0
MEAN	4.7	0.0	.2	11.8	0.0	0.0	4.1
STD DEV	.5	0.0	.0	2.1	0.0	0.0	6.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.6	0.0	.2	11.0	0.0	0.0	2.0
2	4.4	0.0	.2	14.0	0.0	0.0	1.0
3	4.9	0.0	.2	20.0	0.0	0.0	1.0
4	4.7	0.0	.2	14.0	0.0	0.0	3.0
5	4.6	0.0	.2	14.5	0.0	0.0	3.0
6	4.9	0.0	.1	11.5	0.0	0.0	2.0
7	5.9	0.0	.2	17.5	0.0	0.0	1.0
8	5.5	0.0	.2	17.0	0.0	0.0	1.0
9	4.8	0.0	.1	14.5	0.0	0.0	2.0
10	5.9	0.0	.2	15.5	0.0	0.0	1.0
11	5.9	0.0	.2	16.0	0.0	0.0	1.0
12	5.9	0.0	.3	19.5	0.0	0.0	4.0
13	5.9	0.0	.3	21.0	0.0	0.0	1.0
14	5.9	0.0	.2	7.5	0.0	0.0	1.0
15	4.8	0.0	.3	15.0	0.0	0.0	2.0
16	5.3	0.0	.2	13.0	0.0	0.0	1.0
17	5.7	0.0	.3	19.0	0.0	0.0	3.0
18	3.4	0.0	.2	6.0	0.0	0.0	1.0
19	5.9	0.0	.2	12.0	0.0	0.0	1.0
20	4.9	0.0	.2	14.0	0.0	0.0	1.0
MEAN	5.2	0.0	.2	14.6	0.0	0.0	1.7
STD DEV	.7	0.0	.1	3.9	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 15 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.9	0.0	.2	11.7	0.0	0.0	1.0
2	5.8	0.0	.2	14.9	0.0	0.0	1.0
3	5.7	0.0	.2	8.1	0.0	0.0	2.0
4	5.9	0.0	.2	11.4	0.0	0.0	1.0
5	5.7	0.0	.2	15.6	0.0	0.0	3.0
6	5.6	0.0	.1	10.6	0.0	0.0	1.0
7	5.7	0.0	.2	14.5	0.0	0.0	2.0
8	5.8	0.0	.2	16.2	0.0	0.0	1.0
9	5.9	0.0	.2	19.9	0.0	0.0	2.0
10	5.6	0.0	.2	17.6	0.0	0.0	3.0
11	5.5	0.0	.2	15.5	0.0	0.0	4.0
12	5.7	0.0	.2	10.2	0.0	0.0	4.0
13	5.7	0.0	.2	17.5	0.0	0.0	1.0
14	5.3	0.0	.2	16.9	0.0	0.0	2.0
15	5.3	0.0	.2	18.1	0.0	0.0	3.0
16	5.4	0.0	.1	12.5	0.0	0.0	1.0
17	5.7	0.0	.3	20.6	0.0	0.0	4.0
18	5.3	0.0	.1	14.5	0.0	0.0	1.0
19	5.6	0.0	.1	16.6	0.0	0.0	1.0
20	5.5	0.0	.2	15.7	0.0	0.0	1.0
MEAN	5.6	0.0	.2	15.0	0.0	0.0	2.0
STD DEV	.2	0.0	.0	3.3	0.0	0.0	1.1

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	6.4	0.0	.1	15.1	0.0	0.0	1.0
2	6.4	0.0	.1	13.5	0.0	0.0	1.0
3	6.5	0.0	.1	13.4	0.0	0.0	1.0
4	6.3	0.0	.1	19.1	0.0	0.0	1.0
5	6.6	0.0	.2	18.1	0.0	0.0	1.0
6	6.4	0.0	.1	18.4	0.0	0.0	1.0
7	6.3	0.0	.2	23.9	0.0	0.0	2.0
8	6.2	0.0	.2	28.3	0.0	0.0	1.0
9	6.4	0.0	.1	21.6	0.0	0.0	2.0
10	6.3	0.0	.1	21.7	0.0	0.0	4.0
11	6.3	0.0	.2	23.9	0.0	0.0	2.0
12	6.1	0.0	.1	11.6	0.0	0.0	1.0
13	6.2	0.0	.2	22.8	0.0	0.0	1.0
14	6.3	0.0	.1	14.1	0.0	0.0	1.0
15	6.3	0.0	.1	15.4	0.0	0.0	2.0
16	6.2	0.0	.1	12.1	0.0	0.0	1.0
17	6.1	0.0	.1	16.2	0.0	0.0	2.0
18	6.3	0.0	.1	23.6	0.0	0.0	1.0
19	6.2	0.0	.2	28.1	0.0	0.0	1.0
20	6.4	0.0	.2	19.7	0.0	0.0	3.0
MEAN	6.3	0.0	.1	19.0	0.0	0.0	1.5
STD DEV	.1	0.0	.0	5.1	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA MESA ANT

DATE 12 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.3	0.0	.2	13.6	0.0	0.0	3.0
2	6.5	0.0	.1	15.0	0.0	0.0	3.0
3	6.8	0.0	.1	9.1	0.0	0.0	1.0
4	6.7	0.0	.1	10.4	0.0	0.0	1.0
5	6.5	0.0	.1	14.1	0.0	0.0	2.0
6	6.5	0.0	.2	17.1	0.0	0.0	3.0
7	6.6	0.0	.1	13.9	0.0	0.0	4.0
8	6.6	0.0	.1	11.2	0.0	0.0	1.0
9	6.7	0.0	.1	12.9	0.0	0.0	1.0
10	6.5	0.0	.1	14.2	0.0	0.0	3.0
11	6.6	0.0	.2	16.2	0.0	0.0	1.0
12	6.4	0.0	.2	15.4	0.0	0.0	1.0
13	6.5	0.0	.2	17.5	0.0	0.0	1.0
14	6.4	0.0	.2	10.6	0.0	0.0	1.0
15	6.3	0.0	.2	11.5	0.0	0.0	2.0
16	6.5	0.0	.1	10.6	0.0	0.0	2.0
17	6.5	0.0	.2	12.5	0.0	0.0	1.0
18	6.4	0.0	.1	15.8	0.0	0.0	3.0
19	6.4	0.0	.2	24.6	0.0	0.0	2.0
20	6.5	0.0	.1	9.5	0.0	0.0	2.0
MEAN	6.5	0.0	.1	13.8	0.0	0.0	1.9
STD DEV	.1	0.0	.1	3.6	0.0	0.0	1.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 31 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	6.7	0.0	.2	16.0	0.0	0.0	2.0
2	6.5	0.0	.1	11.5	0.0	0.0	1.0
3	6.7	0.0	.1	13.0	0.0	0.0	1.0
4	6.7	0.0	.1	15.0	0.0	0.0	3.0
5	6.3	0.0	.2	19.5	0.0	0.0	1.0
6	6.4	0.0	.1	20.5	0.0	0.0	4.0
7	6.9	0.0	.2	18.5	0.0	0.0	1.0
8	6.8	0.0	.1	21.3	0.0	0.0	1.0
9	6.8	0.0	.2	17.5	0.0	0.0	1.0
10	6.6	0.0	.2	22.0	0.0	0.0	2.0
11	6.7	0.0	.1	15.4	0.0	0.0	2.0
12	6.9	0.0	.2	15.3	0.0	0.0	1.0
13	6.8	0.0	.2	21.5	0.0	0.0	2.0
14	6.7	0.0	.2	29.7	0.0	0.0	1.0
15	6.6	0.0	.2	15.5	0.0	0.0	1.0
16	6.5	0.0	.1	14.0	0.0	0.0	1.0
17	6.5	0.0	.1	13.5	0.0	0.0	2.0
18	6.7	0.0	.1	18.0	0.0	0.0	1.0
19	6.8	0.0	.1	18.6	0.0	0.0	1.0
20	6.5	0.0	.1	16.5	0.0	0.0	2.0
MEAN	6.7	0.0	.1	17.6	0.0	0.0	1.6
STD DEV	.2	0.0	.1	4.1	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	6.7	0.0	.2	15.0	0.0	0.0	1.0
2	6.9	0.0	.1	12.5	0.0	0.0	1.0
3	6.9	0.0	.1	12.7	0.0	0.0	1.0
4	6.9	0.0	.1	9.0	0.0	0.0	1.0
5	6.9	0.0	.1	9.3	0.0	0.0	1.0
6	6.8	0.0	.1	11.5	0.0	0.0	2.0
7	6.9	0.0	.1	11.5	0.0	0.0	1.0
8	6.8	0.0	.1	12.5	0.0	0.0	1.0
9	6.8	0.0	.1	9.8	0.0	0.0	1.0
10	6.9	0.0	.1	7.3	0.0	0.0	1.0
11	6.9	0.0	.2	22.5	0.0	0.0	2.0
12	6.9	0.0	.1	12.5	0.0	0.0	2.0
13	6.9	0.0	.1	15.8	0.0	0.0	2.0
14	6.7	0.0	.1	13.5	0.0	0.0	2.0
15	6.7	0.0	.1	9.5	0.0	0.0	1.0
16	6.8	0.0	.1	13.5	0.0	0.0	1.0
17	6.8	0.0	.1	13.5	0.0	0.0	1.0
18	6.7	0.0	.1	14.5	0.0	0.0	2.0
19	6.8	0.0	.1	22.0	0.0	0.0	1.0
20	6.7	0.0	.2	30.0	0.0	0.0	2.0
MEAN	6.8	0.0	.1	13.9	0.0	0.0	1.4
STD DEV	.1	0.0	.0	5.4	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 25 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	3.8	0.0	.3	11.0	0.0	0.0	2.0
2	4.3	0.0	.3	9.0	0.0	0.0	2.0
3	3.8	0.0	.2	8.0	0.0	0.0	1.0
4	4.6	0.0	.3	5.0	0.0	0.0	2.0
5	4.2	0.0	.2	6.0	0.0	0.0	2.0
6	4.4	0.0	.3	8.0	0.0	0.0	2.0
7	3.9	0.0	.2	7.0	0.0	0.0	2.0
8	3.8	0.0	.2	7.0	0.0	0.0	1.0
9	4.2	0.0	.2	8.0	0.0	0.0	1.0
10	3.7	0.0	.2	9.0	0.0	0.0	1.0
11	4.2	0.0	.2	6.0	0.0	0.0	1.0
12	3.4	0.0	.3	8.0	0.0	0.0	1.0
13	4.1	0.0	.2	9.0	0.0	0.0	1.0
14	3.6	0.0	.2	5.0	0.0	0.0	1.0
15	3.5	0.0	.3	9.0	0.0	0.0	2.0
16	3.7	0.0	.3	7.0	0.0	0.0	2.0
17	3.9	0.0	.2	8.0	0.0	0.0	2.0
18	3.8	0.0	.2	8.0	0.0	0.0	2.0
19	4.5	0.0	.2	10.0	0.0	0.0	1.0
20	3.4	0.0	.2	4.0	0.0	0.0	1.0
MEAN	3.9	0.0	.2	7.6	0.0	0.0	1.5
STD DEV	.4	0.0	.0	1.8	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK7 CULM	NDS. VEG. PLANT
1	4.0	0.0	.2	10.8	0.0	0.0	2.0
2	3.8	0.0	.2	7.5	0.0	0.0	3.0
3	3.9	0.0	.2	8.6	0.0	0.0	2.0
4	4.7	0.0	.2	15.1	0.0	0.0	1.0
5	4.2	0.0	.2	8.8	0.0	0.0	1.0
6	4.5	0.0	.3	12.5	0.0	0.0	1.0
7	4.9	0.0	.2	8.3	0.0	0.0	1.0
8	4.6	0.0	.2	12.5	0.0	0.0	1.0
9	3.8	0.0	.2	17.1	0.0	0.0	3.0
10	4.3	0.0	.2	4.1	0.0	0.0	1.0
11	4.6	0.0	.2	11.6	0.0	0.0	1.0
12	4.2	0.0	.2	14.1	0.0	0.0	1.0
13	4.9	0.0	.2	9.1	0.0	0.0	1.0
14	4.2	0.0	.2	10.0	0.0	0.0	2.0
15	4.7	0.0	.2	11.1	0.0	0.0	2.0
16	4.7	0.0	.2	8.9	0.0	0.0	1.0
17	3.6	0.0	.2	5.0	0.0	0.0	1.0
18	4.6	0.0	.2	11.5	0.0	0.0	1.0
19	3.8	0.0	.2	13.1	0.0	0.0	2.0
20	4.1	0.0	.2	8.5	0.0	0.0	1.0
MEAN	4.3	0.0	.2	10.4	0.0	0.0	1.5
STD DEV	.4	0.0	.0	3.2	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA OWL DRAW

DATE 25 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.3	0.0	.3	9.2	0.0	0.0	1.0
2	5.3	0.0	.2	8.5	0.0	0.0	1.0
3	5.4	0.0	.2	11.7	0.0	0.0	1.0
4	5.4	0.0	.2	10.2	0.0	0.0	1.0
5	4.9	0.0	.2	11.9	0.0	0.0	2.0
6	5.1	0.0	.2	13.8	0.0	0.0	1.0
7	5.1	0.0	.1	13.4	0.0	0.0	7.0
8	5.1	0.0	.2	10.9	0.0	0.0	2.0
9	5.3	0.0	.2	9.5	0.0	0.0	1.0
10	5.0	0.0	.2	17.8	0.0	0.0	3.0
11	4.8	0.0	.2	8.9	0.0	0.0	3.0
12	4.8	0.0	.2	9.2	0.0	0.0	5.0
13	5.1	0.0	.2	10.6	0.0	0.0	1.0
14	4.9	0.0	.2	13.9	0.0	0.0	1.0
15	5.1	0.0	.2	8.5	0.0	0.0	5.0
16	4.9	0.0	.1	8.1	0.0	0.0	1.0
17	4.9	0.0	.2	9.6	0.0	0.0	1.0
18	5.2	0.0	.2	11.5	0.0	0.0	2.0
19	5.2	0.0	.2	13.4	0.0	0.0	2.0
20	5.1	0.0	.2	12.1	0.0	0.0	4.0
MEAN	5.1	0.0	.2	11.1	0.0	0.0	2.3
STD DEV	.2	0.0	.0	2.4	0.0	0.0	1.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 2 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.5	0.0	.2	14.0	0.0	0.0	1.0
2	4.8	0.0	.2	13.5	0.0	0.0	1.0
3	4.1	0.0	.2	15.0	0.0	0.0	1.0
4	4.9	0.0	.2	13.0	0.0	0.0	1.0
5	4.9	0.0	.2	12.0	0.0	0.0	1.0
6	3.9	0.0	.2	10.0	0.0	0.0	1.0
7	4.8	0.0	.3	17.5	0.0	0.0	2.0
8	5.3	0.0	.2	13.0	0.0	0.0	1.0
9	4.3	0.0	.2	11.0	0.0	0.0	2.0
10	5.2	0.0	.4	16.0	0.0	0.0	1.0
11	4.4	0.0	.2	9.5	0.0	0.0	2.0
12	4.5	0.0	.3	9.0	0.0	0.0	1.0
13	4.7	0.0	.2	8.5	0.0	0.0	1.0
14	4.2	0.0	.2	10.0	0.0	0.0	1.0
15	3.7	0.0	.2	6.0	0.0	0.0	1.0
16	3.8	0.0	.2	7.0	0.0	0.0	1.0
17	4.8	0.0	.2	10.0	0.0	0.0	1.0
18	5.2	0.0	.4	15.0	0.0	0.0	2.0
19	3.5	0.0	.2	10.0	0.0	0.0	2.0
20	5.1	0.0	.3	14.0	0.0	0.0	1.0
MEAN	4.5	0.0	.2	11.7	0.0	0.0	1.3
STD DEV	.5	0.0	.1	3.1	0.0	0.0	.6

DENSITY = 12/FT**2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT

1	5.8	0.0	.2	12.0	0.0	0.0	5.0
2	4.9	0.0	.2	12.0	0.0	0.0	1.0
3	4.9	0.0	.2	12.5	0.0	0.0	2.0
4	3.9	0.0	.1	11.0	0.0	0.0	2.0
5	5.2	0.0	.3	12.5	0.0	0.0	3.0
6	5.3	0.0	.4	18.0	0.0	0.0	1.0
7	5.1	0.0	.3	16.0	0.0	0.0	2.0
8	5.2	0.0	.2	13.0	0.0	0.0	1.0
9	4.9	0.0	.2	17.0	0.0	0.0	1.0
10	4.9	0.0	.3	14.0	0.0	0.0	1.0
11	5.4	0.0	.2	12.5	0.0	0.0	1.0
12	4.9	0.0	.2	8.0	0.0	0.0	1.0
13	5.9	0.0	.3	15.0	0.0	0.0	1.0
14	4.2	0.0	.1	8.0	0.0	0.0	2.0
15	4.5	0.0	.2	6.0	0.0	0.0	1.0
16	5.9	0.0	.2	13.0	0.0	0.0	1.0
17	3.9	0.0	.1	10.5	0.0	0.0	3.0
18	4.9	0.0	.2	14.5	0.0	0.0	1.0
19	4.5	0.0	.2	11.0	0.0	0.0	1.0
20	4.3	0.0	.2	11.0	0.0	0.0	2.0
MEAN	4.9	0.0	.2	12.4	0.0	0.0	1.7
STD DEV	.6	0.0	.1	3.0	0.0	0.0	1.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA DNL DRAW

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.5	0.0	.2	11.5	0.0	0.0	3.0
2	4.2	0.0	.2	17.5	0.0	0.0	2.0
3	4.1	0.0	.2	6.5	0.0	0.0	1.0
4	4.8	0.0	.2	12.0	0.0	0.0	1.0
5	4.4	0.0	.2	13.5	0.0	0.0	1.0
6	4.6	0.0	.2	13.0	0.0	0.0	1.0
7	4.9	0.0	.2	18.5	0.0	0.0	1.0
8	4.8	0.0	.2	8.5	0.0	0.0	1.0
9	5.0	0.0	.2	24.0	0.0	0.0	2.0
10	4.9	0.0	.2	15.0	0.0	0.0	1.0
11	5.0	0.0	.2	16.5	0.0	0.0	1.0
12	4.7	0.0	.2	16.0	0.0	0.0	1.0
13	4.8	0.0	.2	17.5	0.0	0.0	1.0
14	4.5	0.0	.2	18.0	0.0	0.0	1.0
15	3.9	0.0	.2	17.5	0.0	0.0	1.0
16	4.8	0.0	.2	14.0	0.0	0.0	1.0
17	4.9	0.0	.2	13.0	0.0	0.0	1.0
18	4.9	0.0	.2	17.5	0.0	0.0	1.0
19	4.8	0.0	.1	7.0	0.0	0.0	1.0
20	4.6	0.0	.1	8.0	0.0	0.0	2.0
MEAN	4.7	0.0	.2	14.3	0.0	0.0	1.3
STD DEV	.3	0.0	.0	4.5	0.0	0.0	.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 13 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.7	0.0	.1	11.4	0.0	0.0	2.0
2	5.9	0.0	.2	13.8	0.0	0.0	1.0
3	6.2	0.0	.1	10.1	0.0	0.0	1.0
4	5.2	0.0	.1	9.7	0.0	0.0	2.0
5	5.6	0.0	.2	12.3	0.0	0.0	1.0
6	5.7	0.0	.2	12.7	0.0	0.0	1.0
7	6.3	0.0	.2	7.9	0.0	0.0	1.0
8	6.1	0.0	.1	6.3	0.0	0.0	2.0
9	5.9	0.0	.2	14.3	0.0	0.0	2.0
10	5.6	0.0	.2	8.0	0.0	0.0	1.0
11	5.9	0.0	.2	10.5	0.0	0.0	1.0
12	5.4	0.0	.2	7.7	0.0	0.0	3.0
13	5.7	0.0	.2	12.4	0.0	0.0	1.0
14	5.9	0.0	.2	9.3	0.0	0.0	1.0
15	5.7	0.0	.2	15.1	0.0	0.0	2.0
16	5.6	0.0	.2	8.6	0.0	0.0	1.0
17	6.6	0.0	.1	7.7	0.0	0.0	1.0
18	5.2	0.0	.1	12.6	0.0	0.0	1.0
19	5.6	0.0	.1	10.2	0.0	0.0	1.0
20	5.4	0.0	.1	12.2	0.0	0.0	1.0
MEAN	5.8	0.0	.2	10.6	0.0	0.0	1.4
STD DEV	.4	0.0	.1	2.5	0.0	0.0	.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 28 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	6.3	0.0	.3	15.3	0.0	0.0	1.0
2	6.2	0.0	.3	16.6	0.0	0.0	2.0
3	6.3	0.0	.3	17.9	0.0	0.0	1.0
4	6.4	0.0	.2	14.6	0.0	0.0	1.0
5	6.3	0.0	.3	20.6	0.0	0.0	1.0
6	6.2	0.0	.2	13.2	0.0	0.0	1.0
7	6.2	0.0	.2	12.8	0.0	0.0	1.0
8	6.3	0.0	.3	21.5	0.0	0.0	1.0
9	6.3	0.0	.3	21.6	0.0	0.0	3.0
10	6.2	0.0	.3	17.0	0.0	0.0	1.0
11	6.2	0.0	.3	18.4	0.0	0.0	4.0
12	6.3	0.0	.2	14.2	0.0	0.0	1.0
13	6.2	0.0	.3	16.9	0.0	0.0	1.0
14	6.3	0.0	.3	14.5	0.0	0.0	1.0
15	6.5	0.0	.3	13.6	0.0	0.0	1.0
16	6.3	0.0	.3	17.3	0.0	0.0	1.0
17	6.3	0.0	.3	15.2	0.0	0.0	1.0
18	6.2	0.0	.2	12.1	0.0	0.0	1.0
19	6.4	0.0	.2	13.2	0.0	0.0	1.0
20	6.3	0.0	.2	10.1	0.0	0.0	1.0
MEAN	6.3	0.0	.3	15.8	0.0	0.0	1.3
STD DEV	.1	0.0	.0	3.1	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 26 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.5	0.0	.2	19.6	0.0	0.0	4.0
2	6.6	0.0	.2	17.6	0.0	0.0	1.0
3	6.6	0.0	.2	14.9	0.0	0.0	3.0
4	6.7	0.0	.2	17.3	0.0	0.0	3.0
5	6.6	0.0	.2	14.9	0.0	0.0	4.0
6	6.4	0.0	.3	20.5	0.0	0.0	5.0
7	6.7	0.0	.2	15.7	0.0	0.0	2.0
8	6.7	0.0	.2	14.1	0.0	0.0	1.0
9	6.4	0.0	.2	14.8	0.0	0.0	1.0
10	6.7	0.0	.2	12.9	0.0	0.0	3.0
11	6.8	0.0	.2	10.1	0.0	0.0	1.0
12	6.6	0.0	.2	14.3	0.0	0.0	4.0
13	6.6	0.0	.1	10.8	0.0	0.0	3.0
14	6.9	0.0	.1	7.2	0.0	0.0	1.0
15	6.8	16.9	.2	8.7	15.4	0.0	1.0
16	6.9	16.9	.2	16.9	23.2	0.0	2.0
17	6.6	0.0	.2	17.3	0.0	0.0	1.0
18	6.3	0.0	.2	17.4	0.0	0.0	1.0
19	6.3	0.0	.2	14.5	0.0	0.0	2.0
20	6.4	0.0	.3	22.2	0.0	0.0	1.0
MEAN	6.6	16.9	.2	15.1	19.3	0.0	2.2
STD DEV	.2	0.0	.0	3.8	5.5	0.0	1.3

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 5 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.8	0.0	.2	13.6	0.0	0.0	3.0
2	6.9	0.0	.2	10.2	0.0	0.0	1.0
3	6.9	0.0	.2	10.8	0.0	0.0	2.0
4	6.8	0.0	.3	16.4	0.0	0.0	3.0
5	6.7	0.0	.3	13.5	0.0	0.0	4.0
6	6.8	0.0	.2	16.0	0.0	0.0	2.0
7	6.8	0.0	.3	24.1	0.0	0.0	1.0
8	6.8	0.0	.3	14.2	0.0	0.0	2.0
9	6.8	0.0	.3	19.6	0.0	0.0	1.0
10	6.8	0.0	.3	15.2	0.0	0.0	1.0
11	6.8	0.0	.3	17.3	0.0	0.0	2.0
12	6.9	0.0	.2	13.5	0.0	0.0	1.0
13	6.9	0.0	.2	14.8	0.0	0.0	1.0
14	6.9	0.0	.3	11.1	0.0	0.0	2.0
15	6.9	0.0	.2	11.6	0.0	0.0	1.0
16	6.8	0.0	.3	16.1	0.0	0.0	1.0
17	6.9	0.0	.3	17.8	0.0	0.0	2.0
18	6.8	0.0	.2	18.2	0.0	0.0	9.0
19	6.9	0.0	.2	12.7	0.0	0.0	2.0
20	6.8	0.0	.3	21.0	0.0	0.0	3.0
MEAN	6.8	0.0	.3	15.4	0.0	0.0	2.2
STD DEV	.1	0.0	.1	3.6	0.0	0.0	1.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.9	0.0	.2	29.3	0.0	0.0	1.0
2	6.9	0.0	.2	18.4	0.0	0.0	1.0
3	7.3	0.0	.2	13.6	0.0	0.0	3.0
4	6.9	0.0	.3	21.4	0.0	0.0	1.0
5	6.9	0.0	.2	18.7	0.0	0.0	2.0
6	7.2	0.0	.2	17.7	0.0	0.0	1.0
7	6.9	0.0	.2	25.2	0.0	0.0	1.0
8	7.4	0.0	.2	12.8	0.0	0.0	2.0
9	6.9	0.0	.3	14.9	0.0	0.0	3.0
10	6.9	0.0	.2	15.9	0.0	0.0	1.0
11	6.9	0.0	.2	11.0	0.0	0.0	1.0
12	7.4	0.0	.2	22.8	0.0	0.0	1.0
13	6.9	0.0	.2	12.6	0.0	0.0	1.0
14	7.3	0.0	.2	16.5	0.0	0.0	2.0
15	7.4	0.0	.2	12.3	0.0	0.0	2.0
16	6.9	0.0	.2	12.9	0.0	0.0	3.0
17	6.9	0.0	.2	16.1	0.0	0.0	1.0
18	6.9	0.0	.2	24.1	0.0	0.0	2.0
19	7.5	0.0	.2	17.5	0.0	0.0	1.0
20	6.9	0.0	.3	11.2	0.0	0.0	1.0

MEAN 7.1 0.0 .2 17.2 0.0 0.0 1.6

STD DEV .2 0.0 .0 5.1 0.0 0.0 .8

0.0 = NOT RECORDED

AGROPHYRON SMITHII

STUDY AREA RED WASH

DATE 27 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.6	0.0	.1	9.5	0.0	0.0	3.0
2	3.2	0.0	.1	6.1	0.0	0.0	1.0
3	3.1	0.0	.1	6.5	0.0	0.0	5.0
4	2.9	0.0	.1	5.3	0.0	0.0	2.0
5	3.1	0.0	.1	3.9	0.0	0.0	1.0
6	2.5	0.0	.1	7.6	0.0	0.0	1.0
7	2.1	0.0	.1	6.6	0.0	0.0	3.0
8	3.2	0.0	.1	6.5	0.0	0.0	2.0
9	3.2	0.0	.1	3.9	0.0	0.0	2.0
10	3.2	0.0	.1	3.6	0.0	0.0	2.0
11	2.1	0.0	.1	2.9	0.0	0.0	4.0
12	3.2	0.0	.1	2.5	0.0	0.0	3.0
13	3.3	0.0	.1	8.7	0.0	0.0	3.0
14	3.2	0.0	.1	5.1	0.0	0.0	4.0
15	3.4	0.0	.1	6.7	0.0	0.0	2.0
16	3.2	0.0	.1	5.1	0.0	0.0	2.0
17	2.5	0.0	.1	4.2	0.0	0.0	2.0
18	2.7	0.0	.1	5.6	0.0	0.0	1.0
19	2.4	0.0	.1	3.6	0.0	0.0	1.0
20	3.1	0.0	.1	2.9	0.0	0.0	3.0
MEAN	3.0	0.0	.1	5.3	0.0	0.0	2.4
STD DEV	.4	0.0	.0	1.9	0.0	0.0	1.1

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 2 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	3.5	0.0	.2	6.6	0.0	0.0	2.0
2	3.6	0.0	.1	6.5	0.0	0.0	1.0
3	3.9	0.0	.1	9.8	0.0	0.0	2.0
4	3.6	0.0	.1	8.9	0.0	0.0	2.0
5	3.5	0.0	.1	5.6	0.0	0.0	1.0
6	3.5	0.0	.1	7.6	0.0	0.0	1.0
7	3.6	0.0	.1	7.3	0.0	0.0	1.0
8	3.1	0.0	.1	6.5	0.0	0.0	1.0
9	3.6	0.0	.1	12.9	0.0	0.0	3.0
10	3.6	0.0	.1	10.3	0.0	0.0	2.0
11	3.9	0.0	.1	6.6	0.0	0.0	2.0
12	3.8	0.0	.1	7.8	0.0	0.0	1.0
13	3.9	0.0	.1	10.0	0.0	0.0	2.0
14	3.8	0.0	.1	8.1	0.0	0.0	1.0
15	4.0	0.0	.1	9.5	0.0	0.0	1.0
16	3.9	0.0	.1	8.0	0.0	0.0	1.0
17	3.5	0.0	.1	7.1	0.0	0.0	4.0
18	3.8	0.0	.1	10.3	0.0	0.0	1.0
19	3.2	0.0	.1	9.5	0.0	0.0	1.0
20	3.7	0.0	.1	9.0	0.0	0.0	1.0
MEAN	3.7	0.0	.1	8.4	0.0	0.0	1.6
STD DEV	.2	0.0	.0	1.8	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 26 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	4.6	0.0	.2	20.2	0.0	0.0	2.0
2	4.7	0.0	.2	19.6	0.0	0.0	2.0
3	4.4	0.0	.2	10.1	0.0	0.0	1.0
4	4.7	0.0	.2	14.6	0.0	0.0	1.0
5	4.8	0.0	.2	15.4	0.0	0.0	2.0
6	4.6	0.0	.2	10.6	0.0	0.0	1.0
7	4.7	0.0	.2	13.8	0.0	0.0	3.0
8	4.6	0.0	.2	15.8	0.0	0.0	1.0
9	4.3	0.0	.2	13.5	0.0	0.0	2.0
10	4.4	0.0	.2	14.1	0.0	0.0	1.0
11	4.8	0.0	.2	16.5	0.0	0.0	1.0
12	4.8	0.0	.2	15.8	0.0	0.0	1.0
13	4.7	0.0	.2	15.5	0.0	0.0	3.0
14	4.7	0.0	.2	13.5	0.0	0.0	1.0
15	4.6	0.0	.2	18.1	0.0	0.0	2.0
16	4.6	0.0	.2	21.2	0.0	0.0	1.0
17	4.5	0.0	.2	16.1	0.0	0.0	2.0
18	4.4	0.0	.2	12.1	0.0	0.0	1.0
19	4.4	0.0	.2	10.2	0.0	0.0	1.0
20	4.6	0.0	.2	16.8	0.0	0.0	1.0
MEAN	4.6	0.0	.2	15.2	0.0	0.0	1.5
STD DEV	.2	0.0	.0	3.1	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 2 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	4.6	0.0	.1	16.4	0.0	0.0	2.0	
2	4.8	0.0	.1	13.6	0.0	0.0	2.0	
3	4.7	0.0	.1	15.0	0.0	0.0	2.0	
4	4.4	0.0	.1	15.6	0.0	0.0	1.0	
5	4.1	0.0	.1	11.1	0.0	0.0	1.0	1ST
6	4.7	0.0	.2	17.1	0.0	0.0	2.0	
7	4.7	0.0	.2	15.0	0.0	0.0	1.0	
8	4.8	0.0	.2	16.1	0.0	0.0	2.0	
9	4.7	0.0	.1	11.7	0.0	0.0	1.0	
10	4.3	0.0	.1	13.1	0.0	0.0	2.0	
11	4.8	0.0	.2	15.1	0.0	0.0	4.0	
12	4.2	0.0	.1	14.1	0.0	0.0	1.0	2ND
13	4.8	0.0	.2	16.7	0.0	0.0	3.0	
14	4.5	0.0	.2	18.2	0.0	0.0	1.0	
15	4.7	0.0	.2	9.7	0.0	0.0	1.0	
16	5.1	0.0	.2	20.4	0.0	0.0	2.0	
17	4.9	0.0	.2	19.8	0.0	0.0	5.0	3RD
18	4.8	0.0	.2	17.4	0.0	0.0	1.0	
19	4.8	0.0	.2	12.9	0.0	0.0	2.0	
20	4.8	0.0	.2	13.5	0.0	0.0	1.0	
MEAN	4.7	0.0	.2	15.1	0.0	0.0	1.9	
STD DEV	.2	0.0	.1	2.8	0.0	0.0	1.1	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 16 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	5.5	0.0	.3	22.5	0.0	0.0	1.0	
2	5.1	0.0	.3	19.5	0.0	0.0	2.0	
3	5.8	0.0	.2	20.4	0.0	0.0	2.0	1ST
4	5.3	0.0	.2	19.4	0.0	0.0	1.0	
5	5.4	0.0	.2	18.3	0.0	0.0	1.0	2ND
6	5.5	0.0	.2	18.5	0.0	0.0	1.0	
7	5.6	0.0	.2	14.3	0.0	0.0	1.0	
8	5.2	0.0	.1	13.5	0.0	0.0	2.0	
9	4.9	0.0	.1	10.6	0.0	0.0	2.0	
10	5.4	0.0	.2	20.9	0.0	0.0	2.0	3RD
11	5.7	0.0	.3	19.9	0.0	0.0	1.0	
12	5.1	0.0	.2	17.3	0.0	0.0	2.0	4TH
13	5.4	0.0	.2	18.0	0.0	0.0	1.0	
14	5.9	0.0	.2	18.5	0.0	0.0	1.0	6 LEAVES PRESENT, 5 TH
15	5.7	0.0	.1	17.6	0.0	0.0	2.0	
16	5.3	0.0	.1	18.0	0.0	0.0	2.0	
17	5.6	0.0	.2	18.4	0.0	0.0	3.0	
18	5.1	0.0	.1	13.2	0.0	0.0	3.0	
19	4.9	0.0	.2	15.8	0.0	0.0	1.0	
20	5.7	0.0	.2	19.8	0.0	0.0	2.0	
MEAN	5.4	0.0	.2	17.7	0.0	0.0	1.7	
STD DEV	.3	0.0	.1	2.9	0.0	0.0	.7	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.8	0.0	.1	15.6	0.0	0.0	1.0
2	5.9	0.0	.1	12.3	0.0	0.0	3.0
3	5.6	0.0	.1	12.6	0.0	0.0	1.0
4	5.8	0.0	.1	18.4	0.0	0.0	2.0
5	5.7	0.0	.1	9.3	0.0	0.0	1.0
6	5.4	0.0	.1	13.5	0.0	0.0	1.0
7	5.4	0.0	.1	9.1	0.0	0.0	1.0
8	5.4	0.0	.1	9.5	0.0	0.0	1.0
9	5.9	0.0	.1	13.2	0.0	0.0	2.0
10	5.8	0.0	.2	20.4	0.0	0.0	1.0
11	5.7	0.0	.1	13.2	0.0	0.0	2.0
12	5.9	0.0	.1	11.4	0.0	0.0	2.0
13	5.8	0.0	.2	16.7	0.0	0.0	1.0
14	5.8	0.0	.2	22.2	0.0	0.0	2.0
15	5.7	0.0	.2	13.8	0.0	0.0	2.0
16	5.9	0.0	.3	25.6	0.0	0.0	3.0
17	5.8	0.0	.3	24.1	0.0	0.0	8.0
18	5.7	0.0	.1	11.6	0.0	0.0	3.0
19	5.9	0.0	.2	24.1	0.0	0.0	8.0
20	5.9	0.0	.2	19.2	0.0	0.0	1.0
MEAN	5.7	0.0	.2	15.8	0.0	0.0	2.3
STD DEV	.2	0.0	.1	5.3	0.0	0.0	2.1

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	5.9	0.0	.2	16.1	0.0	0.0	3.0
2	5.9	0.0	.2	13.8	0.0	0.0	3.0
3	5.9	0.0	.2	13.6	0.0	0.0	2.0
4	5.9	0.0	.2	15.2	0.0	0.0	4.0
5	6.0	0.0	.3	15.9	0.0	0.0	2.0
6	5.3	0.0	.3	12.2	0.0	0.0	1.0
7	5.9	0.0	.2	20.6	0.0	0.0	1.0
8	6.0	0.0	.3	20.4	0.0	0.0	8.0
9	5.9	0.0	.4	14.2	0.0	0.0	1.0
10	5.8	0.0	.2	19.6	0.0	0.0	3.0
11	5.9	0.0	.3	19.7	0.0	0.0	6.0
12	5.8	0.0	.3	11.6	0.0	0.0	1.0
13	5.9	0.0	.3	19.4	0.0	0.0	2.0
14	5.9	0.0	.2	15.1	0.0	0.0	3.0
15	5.9	0.0	.2	19.3	0.0	0.0	4.0
16	5.9	0.0	.3	16.6	0.0	0.0	2.0
17	5.9	0.0	.3	20.9	0.0	0.0	1.0
18	5.8	0.0	.2	14.6	0.0	0.0	1.0
19	5.9	0.0	.4	18.5	0.0	0.0	1.0
20	5.9	0.0	.3	14.1	0.0	0.0	1.0
MEAN	5.9	0.0	.3	16.6	0.0	0.0	2.5
STD DEV	.1	0.0	.1	3.0	0.0	0.0	1.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 28 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.0	0.0	.2	19.6	0.0	0.0	2.0
2	6.1	0.0	.2	17.6	0.0	0.0	3.0
3	5.9	0.0	.2	17.1	0.0	0.0	1.0
4	6.1	0.0	.2	20.9	0.0	0.0	9.0
5	6.0	0.0	.2	19.6	0.0	0.0	1.0
6	6.2	0.0	.1	14.5	0.0	0.0	5.0
7	6.1	0.0	.2	14.8	0.0	0.0	1.0
8	6.2	0.0	.2	17.1	0.0	0.0	12.0
9	6.1	15.8	.2	30.2	45.5	7.0	15.0
10	6.1	0.0	.3	21.6	0.0	0.0	1.0
11	6.1	0.0	.3	17.9	0.0	0.0	1.0
12	6.1	0.0	.3	18.9	0.0	0.0	1.0
13	6.2	0.0	.2	17.1	0.0	0.0	2.0
14	6.1	0.0	.2	21.7	0.0	0.0	1.0
15	6.0	0.0	.2	17.8	0.0	0.0	2.0
16	6.3	15.4	.2	23.9	42.7	8.0	8.0
17	6.1	0.0	.2	19.8	0.0	0.0	3.0
18	6.0	0.0	.2	20.1	0.0	0.0	3.0
19	6.1	0.0	.2	16.1	0.0	0.0	7.0
20	6.1	0.0	.3	15.4	0.0	0.0	1.0
MEAN	6.1	16.1	.2	19.1	44.1	7.5	4.0
STD DEV	.1	.4	.0	3.6	2.0	.7	4.1

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 11 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	PHENOLOGICAL SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.4	0.0	.1	13.2	0.0	0.0	1.0
2	6.3	0.0	.1	17.6	0.0	0.0	3.0
3	6.3	1.0	.1	14.9	0.0	0.0	2.0
4	6.2	0.0	.1	14.3	0.0	0.0	1.0
5	6.4	0.0	.1	16.1	0.0	0.0	2.0
6	6.5	0.0	.1	14.2	0.0	0.0	2.0
7	6.4	0.0	.2	21.4	0.0	0.0	3.0
8	6.3	0.0	.2	11.7	0.0	0.0	4.0
9	6.3	0.0	.1	16.6	0.0	0.0	2.0
10	6.4	0.0	.2	17.5	0.0	0.0	1.0
11	6.4	0.0	.2	17.6	0.0	0.0	2.0
12	6.4	0.0	.2	16.7	0.0	0.0	2.0
13	6.3	0.0	.1	12.5	0.0	0.0	1.0
14	6.3	0.0	.2	14.5	0.0	0.0	1.0
15	6.4	0.0	.2	13.6	0.0	0.0	3.0
16	6.3	0.0	.2	18.7	0.0	0.0	4.0
17	6.4	0.0	.1	13.3	0.0	0.0	1.0
18	6.2	0.0	.1	11.4	0.0	0.0	2.0
19	6.3	0.0	.2	15.9	0.0	0.0	1.0
20	6.3	0.0	.2	13.6	0.0	0.0	1.0
MEAN	6.3	0.0	.2	15.3	0.0	0.0	2.0
STD DEV	.1	0.0	.1	2.5	0.0	0.0	1.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.3	0.0	.1	15.5	0.0	0.0	2.0
2	6.2	0.0	.2	21.0	0.0	0.0	2.0
3	6.2	0.0	.1	13.0	0.0	0.0	1.0
4	6.2	0.0	.1	16.5	0.0	0.0	2.0
5	6.4	0.0	.1	21.0	0.0	0.0	2.0
6	6.2	0.0	.2	20.0	0.0	0.0	4.0
7	6.5	0.0	.2	18.5	0.0	0.0	1.0
8	6.5	0.0	.2	19.0	0.0	0.0	1.0
9	6.4	0.0	.2	19.5	0.0	0.0	2.0
10	6.7	0.0	.1	18.5	0.0	0.0	3.0
11	6.4	0.0	.2	16.5	0.0	0.0	2.0
12	6.2	0.0	.2	16.5	0.0	0.0	2.0
13	6.5	0.0	.1	17.0	0.0	0.0	1.0
14	6.7	0.0	.1	8.0	0.0	0.0	1.0
15	6.7	0.0	.1	17.5	0.0	0.0	1.0
16	6.4	0.0	.1	18.5	0.0	0.0	3.0
17	6.4	0.0	.1	19.3	0.0	0.0	2.0
18	6.3	0.0	.1	14.0	0.0	0.0	2.0
19	6.5	0.0	.2	28.6	0.0	0.0	1.0
20	6.4	0.0	.1	14.4	0.0	0.0	2.0
MEAN	6.4	0.0	.1	17.6	0.0	0.0	1.9
STD DEV	.2	0.0	.1	4.0	0.0	0.0	.3

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE 19 SEPTEMBER 1982

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	6.6	0.0	.2	18.3	0.0	0.0	1.0
2	6.8	0.0	.2	14.5	0.0	0.0	1.0
3	6.8	0.0	.2	14.0	0.0	0.0	3.0
4	6.8	0.0	.1	14.5	0.0	0.0	2.0
5	6.5	0.0	.1	15.0	0.0	0.0	2.0
6	6.9	0.0	.1	8.5	0.0	0.0	2.0
7	6.6	0.0	.2	14.3	0.0	0.0	1.0
8	6.8	0.0	.2	13.0	0.0	0.0	3.0
9	6.6	0.0	.2	15.0	0.0	0.0	2.0
10	6.8	0.0	.1	14.0	0.0	0.0	1.0
11	6.8	0.0	.2	14.5	0.0	0.0	2.0
12	6.9	0.0	.2	14.5	0.0	0.0	3.0
13	6.8	0.0	.2	15.1	0.0	0.0	3.0
14	6.8	0.0	.2	15.2	0.0	0.0	2.0
15	6.7	0.0	.2	17.0	0.0	0.0	2.0
16	6.7	0.0	.2	12.0	0.0	0.0	1.0
17	6.8	0.0	.2	17.0	0.0	0.0	4.0
18	6.4	0.0	.1	12.0	0.0	0.0	5.0
19	6.8	0.0	.2	17.3	0.0	0.0	1.0
20	6.9	0.0	.2	15.3	0.0	0.0	4.0
MEAN	6.7	0.0	.2	14.6	0.0	0.0	2.3
STD DEV	.1	0.0	.0	2.2	0.0	0.0	1.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 12 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	2.3	0.0	.1	3.1	0.0	0.0	1.0
2	2.2	0.0	.1	1.2	0.0	0.0	1.0
3	1.0	0.0	0.0	0.0	0.0	0.0	1.0
4	2.8	0.0	.2	11.1	0.0	0.0	1.0
5	2.4	0.0	.1	5.2	0.0	0.0	1.0
6	3.3	0.0	.1	7.2	0.0	0.0	1.0
7	1.0	0.0	0.0	0.0	0.0	0.0	1.0
8	3.3	0.0	.2	10.6	0.0	0.0	1.0
9	1.0	0.0	0.0	0.0	0.0	0.0	1.0
10	3.2	0.0	.2	7.2	0.0	0.0	1.0
11	1.0	0.0	0.0	0.0	0.0	0.0	1.0
12	3.4	0.0	.3	7.5	0.0	0.0	1.0
13	2.6	0.0	.1	5.5	0.0	0.0	1.0
14	3.8	0.0	.3	8.3	0.0	0.0	1.0
15	3.3	0.0	.3	14.8	0.0	0.0	1.0
16	3.1	0.0	.2	6.9	0.0	0.0	1.0
17	3.0	0.0	.2	6.7	0.0	0.0	1.0
18	3.6	0.0	.2	8.5	0.0	0.0	1.0
19	3.3	0.0	.2	13.9	0.0	0.0	1.0
20	3.2	0.0	.3	15.3	0.0	0.0	1.0
MEAN	2.6	0.0	.2	8.3	0.0	0.0	1.0
STD DEV	.9	0.0	.1	4.0	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.5	0.0	.2	9.0	0.0	0.0	1.0
2	4.3	0.0	.3	11.0	0.0	0.0	2.0
3	3.8	0.0	.2	8.0	0.0	0.0	2.0
4	3.7	0.0	.3	13.0	0.0	0.0	1.0
5	3.9	0.0	.3	10.0	0.0	0.0	1.0
6	4.6	0.0	.3	10.0	0.0	0.0	1.0
7	4.4	0.0	.3	14.0	0.0	0.0	1.0
8	4.3	0.0	.4	17.0	0.0	0.0	1.0
9	3.9	0.0	.2	10.0	0.0	0.0	1.0
10	3.8	0.0	.2	7.0	0.0	0.0	1.0
11	4.6	0.0	.3	11.0	0.0	0.0	1.0
12	3.9	0.0	.3	6.0	0.0	0.0	1.0
13	4.2	0.0	.3	11.0	0.0	0.0	1.0
14	3.8	0.0	.2	8.0	0.0	0.0	1.0
15	3.6	0.0	.2	4.0	0.0	0.0	1.0
16	4.6	0.0	.2	8.0	0.0	0.0	1.0
17	3.9	0.0	.2	8.0	0.0	0.0	1.0
18	4.7	0.0	.3	13.0	0.0	0.0	1.0
19	4.3	0.0	.2	8.0	0.0	0.0	1.0
20	3.9	0.0	.2	14.0	0.0	0.0	1.0
MEAN	4.2	0.0	.3	10.0	0.0	0.0	1.1
STD DEV	.4	0.0	.1	3.1	0.0	0.0	.3

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 2 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	4.4	0.0	.2	10.5	0.0	0.0	2.0
2	4.5	0.0	.2	9.8	0.0	0.0	4.0
3	4.4	0.0	.2	11.2	0.0	0.0	2.0
4	4.6	0.0	.2	11.2	0.0	0.0	1.0
5	4.1	0.0	.3	15.0	0.0	0.0	2.0
6	4.3	0.0	.3	12.5	0.0	0.0	1.0
7	4.7	0.0	.2	7.9	0.0	0.0	4.0
8	4.6	0.0	.4	15.1	0.0	0.0	2.0
9	4.7	0.0	.3	21.5	0.0	0.0	1.0
10	3.7	0.0	.3	9.5	0.0	0.0	1.0
11	4.8	0.0	.2	11.5	0.0	0.0	2.0
12	3.8	0.0	.3	11.6	0.0	0.0	4.0
13	4.2	0.0	.3	8.6	0.0	0.0	1.0
14	4.2	0.0	.3	15.8	0.0	0.0	2.0
15	4.7	0.0	.3	17.1	0.0	0.0	2.0
16	3.8	0.0	.3	16.4	0.0	0.0	3.0
17	4.2	0.0	.3	9.8	0.0	0.0	2.0
18	4.8	0.0	.3	10.1	0.0	0.0	2.0
19	4.1	0.0	.2	8.1	0.0	0.0	1.0
20	4.2	0.0	.3	13.0	0.0	0.0	1.0
MEAN	4.3	0.0	.3	12.3	0.0	0.0	2.0
STD DEV	.3	0.0	.1	3.5	0.0	0.0	1.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 23 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.5	0.0	.2	17.1	0.0	0.0	2.0
2	4.4	0.0	.2	9.4	0.0	0.0	1.0
3	4.5	0.0	.2	13.8	0.0	0.0	1.0
4	4.5	0.0	.1	14.1	0.0	0.0	1.0
5	4.7	0.0	.1	13.1	0.0	0.0	1.0
6	4.8	0.0	.2	16.1	0.0	0.0	1.0
7	4.8	0.0	.2	19.3	0.0	0.0	1.0
8	4.7	0.0	.2	13.1	0.0	0.0	1.0
9	4.9	0.0	.2	23.5	0.0	0.0	3.0
10	4.6	0.0	.1	17.7	0.0	0.0	1.0
11	4.8	0.0	.1	19.8	0.0	0.0	1.0
12	5.3	0.0	.3	16.1	0.0	0.0	1.0
13	4.7	0.0	.2	19.3	0.0	0.0	1.0
14	4.8	0.0	.2	21.0	0.0	0.0	1.0
15	4.8	0.0	.2	24.1	0.0	0.0	1.0
16	5.4	0.0	.2	11.9	0.0	0.0	1.0
17	4.7	0.0	.1	12.5	0.0	0.0	1.0
18	4.6	0.0	.1	14.5	0.0	0.0	1.0
19	4.8	0.0	.2	21.5	0.0	0.0	1.0
20	4.8	0.0	.2	21.5	0.0	0.0	1.0
MEAN	4.8	0.0	.2	17.0	0.0	0.0	1.2
STD DEV	.2	0.0	.1	4.2	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 5 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	

1	5.3	0.0	.3	25.6	0.0	0.0	1.0	
2	5.0	0.0	.2	17.6	0.0	0.0	1.0	1ST
3	4.9	0.0	.2	12.5	0.0	0.0	1.0	
4	5.3	0.0	.3	16.1	0.0	0.0	2.0	
5	5.4	0.0	.3	15.7	0.0	0.0	1.0	
6	5.5	0.0	.3	18.2	0.0	0.0	1.0	
7	4.8	0.0	.2	16.7	0.0	0.0	1.0	2ND
8	5.7	0.0	.3	16.6	0.0	0.0	2.0	
9	5.1	0.0	.2	17.1	0.0	0.0	1.0	3RD
10	5.9	0.0	.3	21.1	0.0	0.0	1.0	6 LEAVES PRESENT ,4TH
11	4.9	0.0	.3	13.5	0.0	0.0	1.0	5TH\$6THEMPTY
12	5.2	0.0	.2	17.2	0.0	0.0	1.0	
13	4.9	0.0	.2	17.6	0.0	0.0	2.0	7TH
14	5.1	0.0	.3	14.6	0.0	0.0	2.0	8TH
15	5.9	0.0	.2	17.1	0.0	0.0	1.0	6 LEAVES PRESENT
16	5.3	0.0	.2	13.6	0.0	0.0	1.0	
17	5.4	0.0	.2	13.0	0.0	0.0	2.0	
18	4.9	0.0	.2	11.5	0.0	0.0	2.0	9TH
19	5.6	0.0	.3	14.2	0.0	0.0	1.0	
20	5.6	0.0	.3	20.4	0.0	0.0	1.0	
MEAN	5.3	0.0	.3	16.5	0.0	0.0	1.3	
STD DEV	.3	0.0	.1	3.3	0.0	0.0	.5	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 19 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	
1	5.8	0.0	.2	16.8	0.0	0.0	2.0	1ST
2	5.7	0.0	.2	12.9	0.0	0.0	1.0	2ND
3	5.6	0.0	.2	15.9	0.0	0.0	1.0	
4	5.6	0.0	.3	20.1	0.0	0.0	1.0	3RD
5	5.9	0.0	.2	14.6	0.0	0.0	1.0	
6	5.1	0.0	.1	13.6	0.0	0.0	1.0	
7	5.9	0.0	.2	16.7	0.0	0.0	1.0	
8	5.3	0.0	.1	12.1	0.0	0.0	1.0	4TH
9	5.5	0.0	.2	15.9	0.0	0.0	1.0	
10	5.3	0.0	.2	14.1	0.0	0.0	1.0	
11	5.9	0.0	.2	18.6	0.0	0.0	1.0	
12	5.5	0.0	.2	14.6	0.0	0.0	1.0	5TH
13	5.6	0.0	.2	17.1	0.0	0.0	1.0	6TH
14	5.6	0.0	.2	16.8	0.0	0.0	1.0	
15	5.9	0.0	.2	15.5	0.0	0.0	1.0	
16	5.5	0.0	.2	13.0	0.0	0.0	2.0	7TH, 8TH EMPTY
17	5.9	0.0	.2	16.0	0.0	0.0	1.0	9TH
18	5.9	0.0	.2	19.5	0.0	0.0	1.0	
19	5.1	0.0	.1	12.1	0.0	0.0	1.0	10TH
20	5.7	0.0	.2	19.8	0.0	0.0	1.0	
MEAN	5.6	0.0	.2	15.8	0.0	0.0	1.1	
STD DEV	.3	0.0	.0	2.5	0.0	0.0	.3	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.5	0.0	.2	12.5	0.0	0.0	1.0
2	5.4	0.0	.3	13.5	0.0	0.0	1.0
3	4.8	0.0	.2	10.0	0.0	0.0	1.0
4	4.7	0.0	.3	16.5	0.0	0.0	1.0
5	4.5	0.0	.2	10.5	0.0	0.0	1.0
6	4.6	0.0	.4	13.0	0.0	0.0	1.0
7	4.8	0.0	.3	13.5	0.0	0.0	1.0
8	5.4	0.0	.3	15.5	0.0	0.0	1.0
9	5.2	0.0	.3	18.5	0.0	0.0	1.0
10	5.2	0.0	.3	17.5	0.0	0.0	2.0
11	4.8	0.0	.2	11.5	0.0	0.0	0.0
12	5.1	0.0	.3	16.0	0.0	0.0	0.0
13	5.5	0.0	.3	17.0	0.0	0.0	2.0
14	4.0	0.0	.3	20.0	0.0	0.0	2.0
15	4.8	0.0	.3	16.0	0.0	0.0	2.0
16	5.1	0.0	.3	16.5	0.0	0.0	1.0
17	5.1	0.0	.4	26.0	0.0	0.0	2.0
18	5.3	0.0	.3	18.0	0.0	0.0	2.0
19	4.8	0.0	.3	11.0	0.0	0.0	1.0
20	4.9	0.0	.3	15.5	0.0	0.0	1.0
MEAN	4.9	0.0	.3	15.4	0.0	0.0	1.3
STD DEV	.4	0.0	.1	3.8	0.0	0.0	.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 16 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NJS. SPK/ CULM	NOS. VEG. PLANT
1	5.9	0.0	.3	20.1	0.0	0.0	1.0
2	5.9	0.0	.2	15.2	0.0	0.0	1.0
3	5.9	0.0	.2	12.9	0.0	0.0	2.0
4	5.8	0.0	.2	18.1	0.0	0.0	2.0
5	5.6	0.0	.2	28.3	0.0	0.0	1.0
6	5.8	0.0	.2	20.0	0.0	0.0	1.0
7	5.8	0.0	.1	18.9	0.0	0.0	1.0
8	5.9	0.0	.1	20.1	0.0	0.0	1.0
9	5.9	0.0	.1	10.6	0.0	0.0	1.0
10	5.9	0.0	.2	21.8	0.0	0.0	1.0
11	5.9	0.0	.3	15.9	0.0	0.0	2.0
12	5.9	0.0	.2	27.9	0.0	0.0	1.0
13	5.9	0.0	.2	19.6	0.0	0.0	3.0
14	5.8	0.0	.2	13.1	0.0	0.0	1.0
15	5.8	0.0	.2	15.4	0.0	0.0	1.0
16	5.9	0.0	.3	15.7	0.0	0.0	1.0
17	5.7	0.0	.1	16.6	0.0	0.0	1.0
18	5.9	0.0	.2	20.2	0.0	0.0	1.0
19	5.9	0.0	.2	24.2	0.0	0.0	1.0
20	5.9	0.0	.3	18.9	0.0	0.0	1.0
MEAN	5.8	0.0	.2	18.7	0.0	0.0	1.3
STD DEV	.1	0.0	.1	4.6	0.0	0.0	.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 30 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT

1	6.1	0.0	.3	15.6	0.0	0.0	2.0
2	6.1	0.0	.2	17.4	0.0	0.0	1.0
3	6.2	0.0	.1	11.2	0.0	0.0	1.0
4	6.1	0.0	.1	10.1	0.0	0.0	1.0
5	6.2	0.0	.1	10.4	0.0	0.0	1.0
6	6.1	0.0	.3	17.7	0.0	0.0	1.0
7	6.1	0.0	.2	12.1	0.0	0.0	1.0
8	6.2	0.0	.1	11.7	0.0	0.0	1.0
9	6.0	0.0	.2	15.0	0.0	0.0	1.0
10	6.1	0.0	.2	11.6	0.0	0.0	1.0
11	6.2	0.0	.3	16.2	0.0	0.0	1.0
12	6.1	0.0	.2	19.8	0.0	0.0	2.0
13	6.3	0.0	.2	28.5	0.0	0.0	3.0
14	6.2	0.0	.2	19.5	0.0	0.0	1.0
15	6.2	0.0	.2	21.2	0.0	0.0	2.0
16	6.6	15.8	.2	24.1	55.5	6.0	4.0
17	6.2	0.0	.1	18.6	0.0	0.0	2.0
18	6.1	0.0	.1	20.5	0.0	0.0	1.0
19	6.2	0.0	.1	23.9	0.0	0.0	2.0
20	6.0	0.0	.3	24.2	0.0	0.0	1.0
MEAN	6.2	15.8	.2	17.5	55.5	6.0	1.5
STD DEV	.1	0.0	.1	5.3	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 14 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.4	0.0	.2	20.0	0.0	0.0	2.0
2	6.5	0.0	.3	21.7	0.0	0.0	3.0
3	6.5	0.0	.2	18.9	0.0	0.0	3.0
4	6.4	0.0	.2	17.6	0.0	0.0	2.0
5	6.3	0.0	.3	18.1	0.0	0.0	1.0
6	6.5	0.0	.1	14.7	0.0	0.0	1.0
7	6.5	0.0	.2	19.3	0.0	0.0	1.0
8	6.4	0.0	.2	20.3	0.0	0.0	2.0
9	6.6	0.0	.2	18.2	0.0	0.0	1.0
10	6.9	0.0	.1	11.7	0.0	0.0	1.0
11	6.5	0.0	.2	16.3	0.0	0.0	1.0
12	6.5	0.0	.2	15.1	0.0	0.0	1.0
13	6.6	0.0	.1	16.7	0.0	0.0	1.0
14	6.4	0.0	.2	30.6	0.0	0.0	1.0
15	6.3	0.0	.1	21.1	0.0	0.0	1.0
16	6.8	0.0	.1	17.4	0.0	0.0	1.0
17	6.5	0.0	.1	14.6	0.0	0.0	1.0
18	6.4	0.0	.1	16.8	0.0	0.0	1.0
19	6.8	0.0	.2	17.6	0.0	0.0	1.0
20	6.7	0.0	.3	20.1	0.0	0.0	2.0
MEAN	6.5	0.0	.2	18.3	0.0	0.0	1.5
STD DEV	.2	0.0	.1	3.8	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	7.2	0.0	.1	17.9	0.0	0.0	2.0
2	6.9	0.0	.1	13.4	0.0	0.0	1.0
3	6.9	0.0	.1	9.1	0.0	0.0	1.0
4	6.9	0.0	.1	12.1	0.0	0.0	1.0
5	7.3	0.0	.2	16.3	0.0	0.0	1.0
6	6.9	0.0	.1	10.1	0.0	0.0	1.0
7	6.8	0.0	.1	14.1	0.0	0.0	1.0
8	7.1	0.0	.1	13.5	0.0	0.0	1.0
9	6.7	0.0	.1	9.6	0.0	0.0	1.0
10	6.6	0.0	.2	13.1	0.0	0.0	1.0
11	6.6	0.0	.1	10.7	0.0	0.0	2.0
12	7.4	0.0	.2	15.4	0.0	0.0	1.0
13	7.1	0.0	.1	14.3	0.0	0.0	1.0
14	7.3	0.0	.2	15.8	0.0	0.0	2.0
15	6.8	0.0	.1	10.1	0.0	0.0	1.0
16	6.7	0.0	.2	15.5	0.0	0.0	1.0
17	6.5	0.0	.2	19.1	0.0	0.0	1.0
18	6.5	0.0	.2	13.9	0.0	0.0	1.0
19	6.7	0.0	.1	14.7	0.0	0.0	1.0
20	6.6	0.0	.2	14.2	0.0	0.0	1.0
MEAN	6.9	0.0	.1	13.6	0.0	0.0	1.2
STD DEV	.3	0.0	.1	2.7	0.0	0.0	.4

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NJS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	6.9	0.0	.2	15.1	0.0	0.0	1.0
2	6.9	0.0	.3	17.3	0.0	0.0	2.0
3	6.9	0.0	.2	23.7	0.0	0.0	2.0
4	6.9	0.0	.2	18.1	0.0	0.0	1.0
5	6.9	0.0	.2	14.6	0.0	0.0	1.0
6	7.3	0.0	.3	17.6	0.0	0.0	1.0
7	7.1	0.0	.2	19.3	0.0	0.0	1.0
8	7.1	0.0	.2	18.9	0.0	0.0	1.0
9	7.0	0.0	.2	17.3	0.0	0.0	1.0
10	7.2	0.0	.4	24.9	0.0	0.0	1.0
11	6.9	0.0	.2	11.9	0.0	0.0	1.0
12	7.2	0.0	.4	25.2	0.0	0.0	1.0
13	7.1	0.0	.2	18.9	0.0	0.0	1.0
14	7.1	0.0	.2	17.5	0.0	0.0	1.0
15	7.2	0.0	.1	12.5	0.0	0.0	1.0
16	6.9	0.0	.2	19.2	0.0	0.0	1.0
17	6.9	0.0	.2	14.3	0.0	0.0	1.0
18	6.9	0.0	.2	15.7	0.0	0.0	1.0
19	6.9	0.0	.1	14.8	0.0	0.0	1.0
20	7.4	0.0	.2	28.1	0.0	0.0	1.0
MEAN	7.0	0.0	.2	19.2	0.0	0.0	1.1
STD DEV	.2	0.0	.1	4.3	0.0	0.0	.3

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 19 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	2.4	0.0	.1	10.4	0.0	0.0	1.0
2	3.2	0.0	.1	6.2	0.0	0.0	1.0
3	2.4	0.0	.1	6.0	0.0	0.0	1.0
4	2.3	0.0	.1	2.5	0.0	0.0	1.0
5	2.4	0.0	.2	2.6	0.0	0.0	1.0
6	3.2	0.0	.1	7.0	0.0	0.0	1.0
7	3.1	0.0	.1	8.2	0.0	0.0	1.0
8	2.6	0.0	.1	4.5	0.0	0.0	1.0
9	2.7	0.0	.1	9.0	0.0	0.0	1.0
10	3.4	0.0	.1	8.5	0.0	0.0	1.0
11	2.9	0.0	.1	3.0	0.0	0.0	1.0
12	2.9	0.0	.1	2.9	0.0	0.0	1.0
13	2.6	0.0	.1	2.5	0.0	0.0	1.0
14	2.5	0.0	.1	3.6	0.0	0.0	1.0
15	2.3	0.0	.1	1.6	0.0	0.0	1.0
16	3.2	0.0	.1	8.0	0.0	0.0	1.0
17	2.3	0.0	.1	3.1	0.0	0.0	1.0
18	2.5	0.0	.1	2.1	0.0	0.0	1.0
19	2.8	0.0	.1	6.1	0.0	0.0	1.0
20	2.7	0.0	.1	5.9	0.0	0.0	1.0
MEAN	2.7	0.0	.1	5.2	0.0	0.0	1.0
STD DEV	.4	0.0	.0	2.7	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.5	0.0	.1	8.6	0.0	0.0	1.0
2	4.6	0.0	.1	4.6	0.0	0.0	1.0
3	4.3	0.0	.1	9.3	0.0	0.0	1.0
4	4.6	0.0	.1	5.5	0.0	0.0	1.0
5	4.5	0.0	.1	4.8	0.0	0.0	1.0
6	4.8	0.0	.2	5.9	0.0	0.0	1.0
7	4.5	0.0	.2	6.1	0.0	0.0	1.0
8	4.5	0.0	.2	6.7	0.0	0.0	1.0
9	4.3	0.0	.2	7.5	0.0	0.0	1.0
10	4.1	0.0	.1	7.9	0.0	0.0	1.0
11	4.3	0.0	.1	5.1	0.0	0.0	1.0
12	4.2	0.0	.1	3.9	0.0	0.0	1.0
13	4.3	0.0	.2	3.5	0.0	0.0	1.0
14	4.4	0.0	.2	7.8	0.0	0.0	1.0
15	4.3	0.0	.2	4.1	0.0	0.0	1.0
16	4.3	0.0	.2	6.1	0.0	0.0	1.0
17	4.4	0.0	.2	6.2	0.0	0.0	1.0
18	4.4	0.0	.2	4.2	0.0	0.0	1.0
19	4.4	0.0	.2	4.1	0.0	0.0	1.0
20	4.5	0.0	.2	5.9	0.0	0.0	1.0
MEAN	4.4	0.0	.2	5.9	0.0	0.0	1.0
STD DEV	.2	0.0	.1	1.7	0.0	0.0	0.0

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 22 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	4.7	0.0	.3	13.5	0.0	0.0	1.0
2	4.5	0.0	.3	13.8	0.0	0.0	2.0
3	4.7	0.0	.3	9.6	0.0	0.0	1.0
4	4.6	0.0	.2	15.4	0.0	0.0	2.0
5	4.5	0.0	.2	16.5	0.0	0.0	1.0
6	4.5	0.0	.3	13.6	0.0	0.0	1.0
7	4.2	0.0	.2	18.1	0.0	0.0	1.0
8	4.2	0.0	.1	11.8	0.0	0.0	1.0
9	4.5	0.0	.1	10.0	0.0	0.0	1.0
10	4.6	0.0	.1	16.2	0.0	0.0	1.0
11	4.3	0.0	.2	12.1	0.0	0.0	1.0
12	4.7	0.0	.3	23.6	0.0	0.0	2.0
13	4.7	0.0	.2	16.4	0.0	0.0	1.0
14	4.6	0.0	.3	16.8	0.0	0.0	1.0
15	4.3	0.0	.2	15.0	0.0	0.0	1.0
16	4.8	0.0	.2	17.8	0.0	0.0	1.0
17	4.3	0.0	.2	17.8	0.0	0.0	3.0
18	4.7	0.0	.3	18.2	0.0	0.0	2.0
19	4.5	0.0	.3	24.1	0.0	0.0	1.0
20	4.3	0.0	.2	11.1	0.0	0.0	1.0
MEAN	4.5	0.0	.2	15.6	0.0	0.0	1.3
STD DEV	.2	0.0	.1	3.9	0.0	0.0	.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT	

1	4.3	0.0	.2	12.9	0.0	0.0	1.0	
2	5.3	0.0	.2	15.4	0.0	0.0	1.0	
3	4.8	0.0	.2	14.4	0.0	0.0	4.0	
4	4.9	0.0	.2	14.5	0.0	0.0	2.0	
5	4.9	0.0	.2	21.5	0.0	0.0	2.0	
6	5.2	0.0	.2	15.1	0.0	0.0	5.0	
7	4.8	0.0	.2	15.3	0.0	0.0	3.0	
8	5.2	0.0	.2	20.0	0.0	0.0	7.0	1ST
9	5.3	0.0	.2	14.5	0.0	0.0	1.0	
10	5.1	0.0	.2	12.6	0.0	0.0	1.0	
11	5.3	0.0	.3	15.4	0.0	0.0	1.0	
12	5.5	0.0	.2	15.5	0.0	0.0	1.0	
13	4.5	0.0	.2	10.6	0.0	0.0	8.0	2ND
14	4.9	0.0	.3	17.5	0.0	0.0	3.0	
15	5.1	0.0	.3	16.2	0.0	0.0	1.0	
16	4.9	0.0	.3	16.1	0.0	0.0	2.0	
17	5.1	0.0	.3	18.4	0.0	0.0	1.0	
18	4.9	0.0	.2	12.1	0.0	0.0	3.0	
19	5.5	0.0	.3	21.7	0.0	0.0	6.0	3RD
20	5.3	0.0	.2	17.3	0.0	0.0	3.0	
MEAN	5.0	0.0	.2	15.9	0.0	0.0	2.8	
STD DEV	.3	0.0	.0	2.9	0.0	0.0	2.2	

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	5.3	0.0	.3	23.0	0.0	0.0	1.0
2	5.3	0.0	.3	21.0	0.0	0.0	2.0
3	4.7	0.0	.2	15.5	0.0	0.0	2.0
4	5.8	0.0	.2	12.0	0.0	0.0	1.0
5	4.9	0.0	.2	15.0	0.0	0.0	1.0
6	5.4	0.0	.2	24.0	0.0	0.0	1.0
7	5.3	0.0	.3	22.5	0.0	0.0	1.0
8	4.9	0.0	.1	13.0	0.0	0.0	1.0
9	4.1	0.0	.1	12.0	0.0	0.0	1.0
10	5.8	0.0	.3	24.0	0.0	0.0	1.0
11	6.0	0.0	.3	25.0	0.0	0.0	1.0
12	6.0	0.0	.3	21.5	0.0	0.0	1.0
13	5.8	0.0	.3	19.0	0.0	0.0	2.0
14	5.2	0.0	.3	21.0	0.0	0.0	1.0
15	4.1	0.0	.1	10.5	0.0	0.0	3.0
16	5.4	0.0	.2	22.0	0.0	0.0	2.0
17	4.9	0.0	.2	18.0	0.0	0.0	1.0
18	4.9	0.0	.2	23.5	0.0	0.0	1.0
19	5.3	0.0	.2	22.0	0.0	0.0	1.0
20	5.5	0.0	.2	19.0	0.0	0.0	1.0
MEAN	5.2	0.0	.2	19.2	0.0	0.0	1.3
STD DEV	.5	0.0	.1	4.6	0.0	0.0	.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	5.3	0.0	.1	11.5	0.0	0.0	1.0
2	5.5	0.0	.1	13.7	0.0	0.0	1.0
3	5.4	0.0	.1	15.4	0.0	0.0	2.0
4	5.6	0.0	.2	14.5	0.0	0.0	1.0
5	5.6	0.0	.2	16.5	0.0	0.0	1.0
6	5.6	0.0	.2	21.1	0.0	0.0	3.0
7	5.8	0.0	.2	19.8	0.0	0.0	1.0
8	5.9	0.0	.1	18.6	0.0	0.0	1.0
9	5.8	0.0	.1	17.2	0.0	0.0	3.0
10	5.9	0.0	.3	21.2	0.0	0.0	1.0
11	5.7	0.0	.1	18.1	0.0	0.0	2.0
12	5.7	0.0	.1	19.2	0.0	0.0	3.0
13	5.4	0.0	.2	21.6	0.0	0.0	4.0
14	5.9	0.0	.1	20.0	0.0	0.0	2.0
15	5.6	0.0	.2	22.1	0.0	0.0	3.0
16	5.5	0.0	.1	20.9	0.0	0.0	4.0
17	5.9	0.0	.2	21.7	0.0	0.0	1.0
18	5.8	0.0	.1	20.5	0.0	0.0	1.0
19	5.7	0.0	.2	22.8	0.0	0.0	4.0
20	5.5	0.0	.1	18.1	0.0	0.0	1.0
MEAN	5.7	0.0	.2	18.7	0.0	0.0	2.0
STD DEV	.2	0.0	.1	3.1	0.0	0.0	1.2

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 16 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NOS. VEG. PLANT

1	5.8	0.0	.2	18.6	0.0	0.0	3.0
2	6.1	0.0	.1	13.5	0.0	0.0	7.0
3	6.1	0.0	.1	15.4	0.0	0.0	2.0
4	5.9	0.0	.1	29.3	0.0	0.0	5.0
5	5.9	0.0	.1	18.6	0.0	0.0	2.0
6	5.9	0.0	.1	15.1	0.0	0.0	1.0
7	5.7	0.0	.1	18.9	0.0	0.0	2.0
8	5.9	0.0	.1	18.2	0.0	0.0	3.0
9	5.8	0.0	.1	20.1	0.0	0.0	1.0
10	5.9	0.0	.1	15.1	0.0	0.0	2.0
11	5.7	0.0	.1	9.6	0.0	0.0	2.0
12	5.5	0.0	.1	17.2	0.0	0.0	1.0
13	6.1	0.0	.1	17.6	0.0	0.0	2.0
14	5.8	0.0	.2	17.8	0.0	0.0	2.0
15	6.0	0.0	.1	22.1	0.0	0.0	3.0
16	5.9	0.0	.1	15.1	0.0	0.0	2.0
17	6.1	0.0	.1	13.4	0.0	0.0	2.0
18	5.2	0.0	.1	15.2	0.0	0.0	1.0
19	5.9	0.0	.1	13.1	0.0	0.0	1.0
20	6.1	0.0	.2	19.4	0.0	0.0	1.0
MEAN	5.9	0.0	.1	17.2	0.0	0.0	2.3
STD DEV	.2	0.0	.0	4.1	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 30 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.5	15.3	.2	28.6	41.5	8.0	1.0
2	6.4	0.0	.2	13.4	0.0	0.0	1.0
3	6.4	0.0	.1	20.7	0.0	0.0	3.0
4	6.2	0.0	.1	18.3	0.0	0.0	1.0
5	6.4	0.0	.1	20.1	0.0	0.0	2.0
6	6.3	0.0	.1	17.0	0.0	0.0	1.0
7	6.2	0.0	.1	15.6	0.0	0.0	1.0
8	6.3	0.0	.1	12.1	0.0	0.0	1.0
9	6.3	0.0	.2	18.9	0.0	0.0	1.0
10	6.2	0.0	.1	12.1	0.0	0.0	1.0
11	6.3	0.0	.2	25.9	0.0	0.0	7.0
12	6.2	0.0	.2	25.5	0.0	0.0	3.0
13	6.2	0.0	.1	20.6	0.0	0.0	1.0
14	6.2	0.0	.2	16.4	0.0	0.0	1.0
15	6.1	0.0	.1	13.6	0.0	0.0	3.0
16	6.3	0.0	.2	16.5	0.0	0.0	1.0
17	6.2	0.0	.2	16.3	0.0	0.0	3.0
18	6.4	0.0	.1	15.2	0.0	0.0	1.0
19	6.2	0.0	.1	13.6	0.0	0.0	1.0
20	6.2	0.0	.2	18.4	0.0	0.0	1.0
MEAN	6.3	15.3	.1	18.0	41.5	8.0	1.8
STD DEV	.1	0.0	.1	4.6	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 14 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.2	0.0	.2	14.2	0.0	0.0	1.0
2	6.4	0.0	.1	18.2	0.0	0.0	2.0
3	6.6	0.0	.1	13.3	0.0	0.0	2.0
4	6.5	0.0	.1	12.7	0.0	0.0	1.0
5	6.8	0.0	.1	13.9	0.0	0.0	2.0
6	6.7	0.0	.1	17.5	0.0	0.0	2.0
7	6.7	0.0	.1	16.0	0.0	0.0	1.0
8	6.4	0.0	.2	18.7	0.0	0.0	4.0
9	6.4	0.0	.1	17.6	0.0	0.0	7.0
10	6.3	0.0	.1	16.3	0.0	0.0	1.0
11	6.4	0.0	.1	15.4	0.0	0.0	1.0
12	6.3	0.0	.2	14.9	0.0	0.0	1.0
13	6.6	0.0	.1	11.2	0.0	0.0	1.0
14	6.8	0.0	.1	11.5	0.0	0.0	1.0
15	6.9	0.0	.1	14.7	0.0	0.0	1.0
16	6.5	0.0	.2	16.0	0.0	0.0	1.0
17	6.5	0.0	.1	12.9	0.0	0.0	2.0
18	6.7	0.0	.1	9.7	0.0	0.0	1.0
19	6.6	0.0	.2	14.2	0.0	0.0	1.0
20	6.3	0.0	.2	20.2	0.0	0.0	1.0
MEAN	6.5	0.0	.1	15.0	0.0	0.0	1.7
STD DEV	.2	0.0	.0	2.7	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 29 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	6.8	0.0	.1	11.7	0.0	0.0	2.0
2	7.1	0.0	.1	21.2	0.0	0.0	5.0
3	6.8	0.0	.1	15.5	0.0	0.0	1.0
4	6.7	0.0	.2	13.9	0.0	0.0	6.0
5	7.2	0.0	.2	16.6	0.0	0.0	2.0
6	6.8	0.0	.1	14.6	0.0	0.0	3.0
7	6.8	0.0	.1	14.3	0.0	0.0	1.0
8	6.2	0.0	.1	19.2	0.0	0.0	2.0
9	6.7	0.0	.2	14.7	0.0	0.0	1.0
10	6.7	0.0	.1	14.9	0.0	0.0	2.0
11	6.9	0.0	.1	15.1	0.0	0.0	1.0
12	6.8	15.5	.2	19.7	19.2	0.0	6.0
13	6.8	0.0	.2	14.2	0.0	0.0	1.0
14	6.7	0.0	.1	15.6	0.0	0.0	2.0
15	6.6	0.0	.2	19.7	0.0	0.0	3.0
16	6.7	0.0	.2	16.9	0.0	0.0	5.0
17	6.7	0.0	.1	17.8	0.0	0.0	2.0
18	6.6	0.0	.2	13.2	0.0	0.0	1.0
19	6.3	0.0	.1	17.2	0.0	0.0	2.0
20	6.3	0.0	.1	16.8	0.0	0.0	2.0
MEAN	6.7	15.5	.1	15.1	19.2	0.0	2.5
STD DEV	.2	0.0	.1	2.4	0.0	0.0	1.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	7.3	0.0	.2	19.7	0.0	0.0	1.0
2	7.2	0.0	.2	27.3	0.0	0.0	2.0
3	7.2	0.0	.2	17.1	0.0	0.0	1.0
4	7.0	0.0	.2	21.7	0.0	0.0	2.0
5	7.1	0.0	.3	27.1	0.0	0.0	1.0
6	6.9	0.0	.2	25.2	0.0	0.0	1.0
7	6.9	0.0	.2	26.0	0.0	0.0	2.0
8	7.2	0.0	.3	19.9	0.0	0.0	3.0
9	7.0	0.0	.2	26.1	0.0	0.0	1.0
10	7.1	0.0	.3	21.6	0.0	0.0	4.0
11	7.1	0.0	.3	20.2	0.0	0.0	2.0
12	6.9	0.0	.2	27.6	0.0	0.0	1.0
13	6.9	0.0	.2	17.6	0.0	0.0	2.0
14	6.9	0.0	.1	21.2	0.0	0.0	1.0
15	7.2	0.0	.2	21.1	0.0	0.0	1.0
16	7.0	0.0	.2	13.7	0.0	0.0	2.0
17	6.9	0.0	.2	17.6	0.0	0.0	1.0
18	6.9	0.0	.1	16.1	0.0	0.0	2.0
19	6.9	0.0	.1	16.6	0.0	0.0	1.0
20	6.9	0.0	.2	17.5	0.0	0.0	1.0
MEAN	7.0	0.0	.2	21.0	0.0	0.0	1.6
STD DEV	.1	0.0	.1	4.2	0.0	0.0	.8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GCV.

DATE 20 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.2	1.0	.2	8.6	0.0	0.0	1.0
2	3.5	1.0	.1	2.8	0.0	0.0	2.0
3	3.1	1.0	.2	6.6	0.0	0.0	1.0
4	2.0	1.0	.1	6.0	0.0	0.0	1.0
5	4.2	0.0	.2	5.3	0.0	0.0	1.0
6	3.6	1.0	.2	4.5	0.0	0.0	3.0
7	4.4	1.0	.2	7.1	0.0	0.0	1.0
8	4.3	1.0	.2	9.0	0.0	0.0	2.0
9	3.5	1.0	.2	10.6	0.0	0.0	3.0
10	4.2	0.0	.2	6.2	0.0	0.0	1.0
11	3.8	0.0	.2	7.9	0.0	0.0	2.0
12	3.8	1.0	.2	5.1	0.0	0.0	2.0
13	3.6	1.0	.2	7.6	0.0	0.0	2.0
14	3.2	1.0	.1	6.5	0.0	0.0	1.0
15	3.7	1.0	.1	3.6	0.0	0.0	2.0
16	3.4	0.0	.1	5.5	0.0	0.0	4.0
17	3.5	0.0	.2	7.5	0.0	0.0	2.0
18	3.7	0.0	.2	7.1	0.0	0.0	3.0
19	4.5	1.0	.2	7.0	0.0	0.0	1.0
20	3.7	1.0	.2	7.8	0.0	0.0	1.0
MEAN	3.6	0.0	.2	6.6	0.0	0.0	1.8
STD DEV	.6	0.0	.0	1.8	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	3.8	0.0	.1	11.1	0.0	0.0	1.0
2	4.6	0.0	.2	12.1	0.0	0.0	2.0
3	4.5	0.0	.1	9.5	0.0	0.0	1.0
4	4.4	0.0	.2	11.5	0.0	0.0	1.0
5	4.2	0.0	.1	8.9	0.0	0.0	1.0
6	4.4	0.0	.2	12.5	0.0	0.0	1.0
7	4.6	0.0	.2	12.8	0.0	0.0	1.0
8	4.1	0.0	.1	9.8	0.0	0.0	1.0
9	4.3	0.0	.2	14.3	0.0	0.0	1.0
10	4.1	0.0	.1	6.5	0.0	0.0	1.0
11	3.9	0.0	.1	10.2	0.0	0.0	1.0
12	4.1	0.0	.1	8.5	0.0	0.0	1.0
13	4.6	0.0	.1	12.6	0.0	0.0	2.0
14	4.4	0.0	.1	8.9	0.0	0.0	1.0
15	4.6	0.0	.2	14.5	0.0	0.0	2.0
16	4.5	0.0	.2	12.5	0.0	0.0	1.0
17	4.6	0.0	.2	11.8	0.0	0.0	1.0
18	4.0	0.0	.2	10.6	0.0	0.0	1.0
19	4.7	0.0	.2	10.8	0.0	0.0	2.0
20	4.7	0.0	.2	13.5	0.0	0.0	2.0
MEAN	4.4	0.0	.2	11.1	0.0	0.0	1.3
STD DEV	.3	0.0	.1	2.1	0.0	0.0	.4

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 22 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NDS. SPK/ CULM	NDS. VEG. PLANT
1	4.6	0.0	.1	12.2	0.0	0.0	1.0
2	4.8	0.0	.2	16.1	0.0	0.0	1.0
3	4.7	0.0	.2	11.1	0.0	0.0	2.0
4	4.3	0.0	.2	18.6	0.0	0.0	1.0
5	4.6	0.0	.2	19.5	0.0	0.0	5.0
6	4.8	0.0	.2	15.4	0.0	0.0	2.0
7	4.7	0.0	.2	17.1	0.0	0.0	1.0
8	4.8	0.0	.2	15.2	0.0	0.0	1.0
9	4.8	0.0	.2	18.1	0.0	0.0	1.0
10	4.7	0.0	.2	17.1	0.0	0.0	1.0
11	4.0	0.0	.2	8.1	0.0	0.0	1.0
12	4.0	0.0	.2	13.1	0.0	0.0	1.0
13	5.2	0.0	.3	16.5	0.0	0.0	1.0
14	4.5	0.0	.2	12.3	0.0	0.0	1.0
15	4.6	0.0	.3	14.1	0.0	0.0	2.0
16	4.6	0.0	.2	13.6	0.0	0.0	2.0
17	4.8	0.0	.2	15.0	0.0	0.0	1.0
18	4.7	0.0	.2	11.5	0.0	0.0	1.0
19	4.8	0.0	.2	14.6	0.0	0.0	1.0
20	4.3	0.0	.1	10.9	0.0	0.0	1.0
MEAN	4.6	0.0	.2	14.5	0.0	0.0	1.4
STD DEV	.3	0.0	.0	2.9	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
*****	*****	*****	*****	*****	*****	*****	*****
1	5.2	0.0	.2	21.0	0.0	0.0	3.0
2	4.9	0.0	.3	22.0	0.0	0.0	1.0
3	5.1	0.0	.3	26.0	0.0	0.0	3.0
4	5.3	0.0	.3	26.0	0.0	0.0	2.0
5	4.9	0.0	.3	20.0	0.0	0.0	1.0
6	3.9	0.0	.2	19.0	0.0	0.0	1.0
7	4.3	0.0	.2	14.0	0.0	0.0	1.0
8	4.9	0.0	.2	13.5	0.0	0.0	2.0
9	4.8	0.0	.3	23.0	0.0	0.0	1.0
10	4.6	0.0	.3	15.0	0.0	0.0	4.0
11	3.8	0.0	.3	14.0	0.0	0.0	2.0
12	5.2	0.0	.3	20.0	0.0	0.0	1.0
13	4.9	0.0	.2	13.0	0.0	0.0	1.0
14	5.2	0.0	.2	18.0	0.0	0.0	1.0
15	4.6	0.0	.2	16.5	0.0	0.0	2.0
16	4.5	0.0	.3	21.5	0.0	0.0	1.0
17	4.9	0.0	.3	18.0	0.0	0.0	1.0
18	4.9	0.0	.3	19.0	0.0	0.0	1.0
19	4.2	0.0	.2	17.5	0.0	0.0	1.0
20	4.3	0.0	.3	19.0	0.0	0.0	1.0
MEAN	4.7	0.0	.3	18.8	0.0	0.0	1.6
STD DEV	.4	0.0	.1	3.8	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GCV.

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.3	0.0	.2	15.5	0.0	0.0	1.0
2	5.5	0.0	.2	25.9	0.0	0.0	2.0
3	5.9	0.0	.2	16.5	0.0	0.0	1.0
4	5.2	0.0	.2	9.5	0.0	0.0	4.0
5	5.5	0.0	.2	17.8	0.0	0.0	3.0
6	5.8	0.0	.2	20.0	0.0	0.0	2.0
7	5.6	0.0	.2	16.1	0.0	0.0	5.0
8	5.9	0.0	.2	14.2	0.0	0.0	1.0
9	5.2	0.0	.2	11.5	0.0	0.0	1.0
10	5.4	0.0	.2	13.5	0.0	0.0	2.0
11	5.8	0.0	.2	14.6	0.0	0.0	5.0
12	5.6	0.0	.2	17.2	0.0	0.0	1.0
13	5.7	0.0	.2	17.6	0.0	0.0	4.0
14	5.3	0.0	.2	14.1	0.0	0.0	1.0
15	5.6	0.0	.2	16.1	0.0	0.0	3.0
16	5.4	0.0	.2	13.1	0.0	0.0	1.0
17	5.8	0.0	.2	17.3	0.0	0.0	5.0
18	5.3	0.0	.2	13.2	0.0	0.0	4.0
19	5.4	0.0	.2	18.4	0.0	0.0	1.0
20	5.7	0.0	.1	15.6	0.0	0.0	1.0
MEAN	5.6	0.0	.2	15.9	0.0	0.0	2.4
STD DEV	.2	0.0	.0	3.4	0.0	0.0	1.6

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	5.8	0.0	.2	17.6	0.0	0.0	1.0
2	5.9	0.0	.1	15.7	0.0	0.0	2.0
3	6.1	0.0	.2	17.8	0.0	0.0	1.0
4	6.0	0.0	.2	20.4	0.0	0.0	1.0
5	5.9	0.0	.2	19.8	0.0	0.0	1.0
6	5.8	0.0	.2	18.1	0.0	0.0	1.0
7	5.9	0.0	.1	13.9	0.0	0.0	1.0
8	5.9	0.0	.2	20.6	0.0	0.0	1.0
9	5.9	0.0	.1	14.1	0.0	0.0	1.0
10	5.8	0.0	.1	15.6	0.0	0.0	3.0
11	5.9	0.0	.2	20.2	0.0	0.0	3.0
12	5.8	0.0	.2	21.6	0.0	0.0	1.0
13	5.7	0.0	.2	21.8	0.0	0.0	1.0
14	5.9	0.0	.2	20.6	0.0	0.0	2.0
15	6.0	0.0	.1	19.1	0.0	0.0	1.0
16	5.7	0.0	.1	16.4	0.0	0.0	1.0
17	5.8	0.0	.1	16.7	0.0	0.0	1.0
18	5.8	0.0	.1	12.6	0.0	0.0	1.0
19	5.9	0.0	.1	21.6	0.0	0.0	2.0
20	6.0	0.0	.1	17.1	0.0	0.0	1.0

MEAN	5.9	0.0	.2	18.1	0.0	0.0	1.4
STD DEV	.1	0.0	.1	2.8	0.0	0.0	.7

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 16 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	5.8	0.0	.2	25.9	0.0	0.0	2.0
2	5.9	0.0	.2	31.0	0.0	0.0	1.0
3	5.9	0.0	.1	17.5	0.0	0.0	6.0
4	5.9	0.0	.1	25.9	0.0	0.0	1.0
5	5.9	0.0	.2	21.8	0.0	0.0	1.0
6	5.9	0.0	.2	19.6	0.0	0.0	2.0
7	5.9	0.0	.1	16.0	0.0	0.0	4.0
8	5.7	0.0	.1	13.1	0.0	0.0	2.0
9	6.0	0.0	.1	19.2	0.0	0.0	1.0
10	6.1	0.0	.2	23.1	0.0	0.0	5.0
11	5.4	0.0	.2	21.1	0.0	0.0	2.0
12	6.0	0.0	.1	14.3	0.0	0.0	6.0
13	5.9	0.0	.2	24.3	0.0	0.0	1.0
14	5.9	0.0	.2	24.1	0.0	0.0	1.0
15	5.9	0.0	.1	16.7	0.0	0.0	3.0
16	5.5	0.0	.1	20.2	0.0	0.0	2.0
17	5.7	0.0	.2	20.6	0.0	0.0	2.0
18	5.8	0.0	.2	20.8	0.0	0.0	2.0
19	5.9	0.0	.2	16.5	0.0	0.0	2.0
20	5.7	0.0	.1	18.8	0.0	0.0	2.0
MEAN	5.8	0.0	.2	20.5	0.0	0.0	2.5
STD DEV	.2	0.0	.1	4.4	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 1 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT
1	6.3	0.0	.1	12.6	0.0	0.0	1.0
2	6.4	0.0	.2	18.9	0.0	0.0	1.0
3	6.3	0.0	.1	20.9	0.0	0.0	1.0
4	6.5	0.0	.3	23.5	0.0	0.0	5.0
5	6.4	0.0	.2	20.1	0.0	0.0	2.0
6	6.3	0.0	.2	16.5	0.0	0.0	1.0
7	6.1	0.0	.2	19.8	0.0	0.0	1.0
8	6.2	0.0	.2	22.2	0.0	0.0	1.0
9	6.2	0.0	.2	20.1	0.0	0.0	2.0
10	6.2	0.0	.2	16.4	0.0	0.0	1.0
11	6.3	0.0	.1	20.6	0.0	0.0	1.0
12	6.2	0.0	.1	16.2	0.0	0.0	1.0
13	6.3	0.0	.2	21.6	0.0	0.0	1.0
14	6.1	0.0	.1	18.6	0.0	0.0	1.0
15	6.2	0.0	.2	21.6	0.0	0.0	1.0
16	6.3	0.0	.2	18.0	0.0	0.0	2.0
17	6.4	0.0	.2	16.6	0.0	0.0	2.0
18	6.4	0.0	.2	17.9	0.0	0.0	1.0
19	6.3	0.0	.2	13.7	0.0	0.0	1.0
20	6.3	0.0	.2	18.1	0.0	0.0	1.0
MEAN	6.3	0.0	.2	18.7	0.0	0.0	1.4
STD DEV	.1	0.0	.1	2.8	0.0	0.0	.9

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GDV.

DATE 14 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.7	0.0	.2	18.6	0.0	0.0	1.0
2	6.8	0.0	.1	24.5	0.0	0.0	2.0
3	6.8	0.0	.2	30.2	0.0	0.0	2.0
4	6.6	0.0	.2	32.5	0.0	0.0	1.0
5	6.6	0.0	.1	23.8	0.0	0.0	1.0
6	6.9	0.0	.1	15.7	0.0	0.0	1.0
7	6.6	0.0	.2	13.6	0.0	0.0	1.0
8	6.7	0.0	.1	19.4	0.0	0.0	2.0
9	6.8	0.0	.1	18.1	0.0	0.0	1.0
10	6.7	0.0	.2	21.3	0.0	0.0	1.0
11	6.7	0.0	.1	18.9	0.0	0.0	1.0
12	6.8	0.0	.2	18.1	0.0	0.0	1.0
13	6.6	0.0	.2	27.3	0.0	0.0	1.0
14	6.7	0.0	.1	16.5	0.0	0.0	1.0
15	6.6	0.0	.2	24.2	0.0	0.0	1.0
16	6.9	0.0	.1	13.9	0.0	0.0	1.0
17	6.6	0.0	.2	22.7	0.0	0.0	1.0
18	6.7	0.0	.2	20.2	0.0	0.0	1.0
19	6.9	0.0	.1	15.8	0.0	0.0	1.0
20	6.7	0.0	.2	19.0	0.0	0.0	1.0
MEAN	6.7	0.0	.2	20.8	0.0	0.0	1.2
STD DEV	.1	0.0	.1	5.1	0.0	0.0	.4

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.9	3.0	.1	23.2	0.0	0.0	1.0
2	6.7	3.0	.2	18.7	0.0	0.0	1.0
3	6.8	0.0	.1	19.1	0.0	0.0	1.0
4	6.9	3.0	.2	21.9	0.0	0.0	1.0
5	6.9	0.0	.1	19.6	0.0	0.0	2.0
6	6.7	0.0	.2	24.9	0.0	0.0	1.0
7	6.9	16.5	.2	18.1	26.0	0.0	1.0
8	6.9	0.0	.1	16.7	0.0	0.0	2.0
9	6.8	0.0	.2	24.5	0.0	0.0	3.0
10	6.8	0.0	.1	28.6	0.0	0.0	2.0
11	6.8	0.0	.1	25.4	0.0	0.0	1.0
12	6.9	0.0	.1	17.1	0.0	0.0	2.0
13	6.8	0.0	.2	24.7	0.0	0.0	1.0
14	6.8	0.0	.1	19.8	0.0	0.0	2.0
15	6.8	3.0	.2	25.2	0.0	0.0	2.0
16	6.8	0.0	.2	20.6	0.0	0.0	2.0
17	6.8	0.0	.2	24.3	0.0	0.0	4.0
18	6.8	3.0	.1	25.4	0.0	0.0	2.0
19	6.9	3.0	.2	23.6	0.0	0.0	2.0
20	6.9	0.0	.1	23.1	0.0	0.0	2.0

MEAN 6.8 16.5 .2 22.2 26.0 0.0 1.8

STD DEV .1 0.0 .1 3.3 0.0 0.0 .8

0.0 = NOT RECORDED

AGROPYRON SMITHII

STUDY AREA UPPER GOV.

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	MAX. LEAF WIDTH	MAX. LEAF HGHT.	MAX. SPIKE HGHT.	NOS. SPK/ CULM	NOS. VEG. PLANT

1	6.9	0.0	.2	11.6	0.0	0.0	1.0
2	6.9	0.0	.1	20.0	0.0	0.0	1.0
3	6.9	0.0	.2	18.1	0.0	0.0	2.0
4	6.9	0.0	.1	14.5	0.0	0.0	1.0
5	6.9	0.0	.2	23.4	0.0	0.0	2.0
6	6.9	0.0	.2	16.1	0.0	0.0	1.0
7	6.6	0.0	.2	23.1	0.0	0.0	1.0
8	6.7	0.0	.2	24.2	0.0	0.0	1.0
9	6.9	0.0	.2	20.6	0.0	0.0	2.0
10	6.9	0.0	.2	16.8	0.0	0.0	1.0
11	6.9	0.0	.2	18.3	0.0	0.0	3.0
12	6.9	0.0	.2	21.2	0.0	0.0	4.0
13	6.9	0.0	.2	19.9	0.0	0.0	7.0
14	6.9	0.0	.2	21.7	0.0	0.0	1.0
15	6.9	0.0	.2	23.4	0.0	0.0	2.0
16	6.9	0.0	.3	20.6	0.0	0.0	1.0
17	6.9	0.0	.2	20.9	0.0	0.0	1.0
18	6.9	0.0	.2	17.3	0.0	0.0	1.0
19	6.9	0.0	.2	19.1	0.0	0.0	1.0
20	6.9	0.0	.2	22.4	0.0	0.0	1.0
MEAN	6.9	0.0	.2	19.7	0.0	0.0	1.8
STD DEV	.1	0.0	.0	3.2	0.0	0.0	1.5

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	3.5	0.0	23.0	10.0	0.0	.1	5.4	0.0	0.	0.	42. 5D
2	3.7	0.0	5.0	3.0	0.0	.1	4.6	0.0	0.	0.	10. 2A
3	4.3	0.0	9.0	5.0	0.0	.1	6.6	0.0	0.	0.	30. 2B
4	3.6	0.0	22.0	20.0	0.0	.1	5.5	0.0	0.	0.	20. 4D
5	3.3	0.0	10.0	5.0	0.0	.1	6.4	0.0	0.	0.	6. 4A
6	3.5	0.0	46.0	26.0	0.0	.2	7.6	0.0	0.	0.	0. 4D
7	4.4	0.0	33.0	20.0	0.0	.2	7.8	0.0	0.	0.	0. 4B
8	3.8	0.0	34.0	23.0	0.0	.2	7.9	0.0	0.	0.	13. 4C
9	3.7	0.0	0.0	0.0	2.0	.2	8.0	0.0	0.	0.	15. 3C
10	3.6	0.0	14.0	6.0	0.0	.1	6.8	0.0	0.	0.	30. 5D
11	3.3	0.0	13.0	9.0	0.0	.1	5.1	0.0	0.	0.	10. 3B
12	3.4	0.0	3.0	2.0	0.0	.1	5.0	0.0	0.	0.	70. 2A
13	4.2	0.0	46.0	29.0	0.0	.1	6.9	0.0	0.	0.	0. 5D
14	4.3	0.0	16.0	14.0	0.0	.2	10.1	0.0	0.	0.	42. 4C
15	3.7	0.0	26.0	15.0	0.0	.1	4.5	0.0	0.	0.	0. 3B
16	3.8	0.0	29.0	15.0	0.0	.2	7.1	0.0	0.	0.	0. 4C
17	3.5	0.0	34.0	10.0	0.0	.1	3.7	0.0	0.	0.	0. 4C
18	3.8	0.0	32.0	10.0	0.0	.1	5.1	0.0	0.	0.	0. 4C
19	3.6	0.0	12.0	8.0	0.0	.1	6.3	0.0	0.	0.	35. 5C
20	3.9	0.0	27.0	19.0	0.0	.2	13.1	0.0	0.	0.	57. 4C
MEAN	3.7	0.0	22.8	13.1	2.0	.1	6.7	0.0	0.	0.	29.
STD DEV	.3	0.0	12.9	7.9	0.0	.0	2.1	0.0	0.	0.	20.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 2 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM

1	4.4	0.0	0.0	0.0	0.0	.2	5.6	0.0	0.	0.	0.
2	4.3	0.0	0.0	0.0	0.0	.2	6.1	0.0	0.	0.	0.
3	4.4	0.0	0.0	0.0	0.0	.1	7.5	0.0	0.	0.	0.
4	4.1	0.0	0.0	0.0	0.0	.2	9.8	0.0	0.	0.	0.
5	3.9	0.0	0.0	0.0	0.0	.2	6.7	0.0	0.	0.	0.
6	4.6	0.0	0.0	0.0	0.0	.3	9.5	0.0	0.	0.	0.
7	4.8	0.0	0.0	0.0	0.0	.3	10.7	0.0	0.	0.	0.
8	5.1	0.0	0.0	0.0	0.0	.3	17.6	0.0	0.	0.	0.
9	4.9	0.0	0.0	0.0	0.0	.2	8.9	0.0	0.	0.	0.
10	4.5	0.0	0.0	0.0	0.0	.2	6.7	0.0	0.	0.	0.
11	4.7	0.0	0.0	0.0	0.0	.2	9.8	0.0	0.	0.	0.
12	4.5	0.0	0.0	0.0	0.0	.1	4.0	0.0	0.	0.	0.
13	5.2	0.0	0.0	0.0	0.0	.3	7.2	0.0	0.	0.	0.
14	5.2	0.0	0.0	0.0	0.0	.3	13.4	0.0	0.	0.	0.
15	3.9	0.0	0.0	0.0	0.0	.2	5.6	0.0	0.	0.	0.
16	4.7	0.0	0.0	0.0	0.0	.3	14.0	0.0	0.	0.	0.
17	4.3	0.0	0.0	0.0	0.0	.2	8.0	0.0	0.	0.	0.
18	4.4	0.0	0.0	0.0	0.0	.2	5.9	0.0	0.	0.	0.
19	4.8	0.0	0.0	0.0	0.0	.2	10.1	0.0	0.	0.	0.
20	4.5	0.0	0.0	0.0	0.0	.3	11.1	0.0	0.	0.	0.
MEAN	4.6	0.0	0.0	0.0	0.0	.2	8.9	0.0	0.	0.	0.
STD DEV	.4	0.0	0.0	0.0	0.0	.1	3.3	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 19 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPR.	CLUMP LGTH. WIDTH	MAX. MAX. DIAM. LEAF LEAF WIDTH HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.6 0.0	30.0 6.0	0.0 .2 8.8	0.0	0.	0.	0.
2	5.3 0.0	38.0 24.0	0.0 .2 9.3	0.0	0.	0.	0.
3	5.2 0.0	10.0 8.0	0.0 .2 14.6	0.0	0.	0.	0.
4	4.9 0.0	22.0 20.0	0.0 .3 15.8	0.0	0.	0.	0.
5	4.9 0.0	28.0 7.0	0.0 .3 13.6	0.0	0.	0.	0.
6	5.5 0.0	48.0 27.0	0.0 .3 14.5	0.0	0.	0.	0.
7	5.4 0.0	36.0 22.0	0.0 .3 13.3	0.0	0.	0.	0.
8	5.1 0.0	37.0 24.0	0.0 .3 26.3	0.0	0.	0.	0.
9	5.2 0.0	10.0 5.0	0.0 .3 12.6	0.0	0.	0.	0.
10	4.8 0.0	9.0 3.0	0.0 .3 10.5	0.0	0.	0.	0.
11	5.2 0.0	13.0 8.0	0.0 .3 18.0	0.0	0.	0.	0.
12	4.9 0.0	12.0 3.0	0.0 .2 8.1	0.0	0.	0.	0.
13	5.3 0.0	8.0 6.0	0.0 .3 15.1	0.0	0.	0.	0.
14	5.2 0.0	15.0 14.0	0.0 .3 24.5	0.0	0.	0.	0.
15	4.4 0.0	6.0 4.0	0.0 .2 13.1	0.0	0.	0.	0.
16	5.5 0.0	29.0 16.0	0.0 .3 26.6	0.0	0.	0.	0.
17	5.1 0.0	34.0 8.0	0.0 .3 14.2	0.0	0.	0.	0.
18	5.0 0.0	30.0 10.0	0.0 .3 12.6	0.0	0.	0.	0.
19	5.2 0.0	20.0 10.0	0.0 .3 18.2	0.0	0.	0.	0.
20	5.1 0.0	30.0 14.0	0.0 .3 21.6	0.0	0.	0.	0.
MEAN	5.1 0.0	23.3 12.0	0.0 .3 15.6	0.0	0.	0.	0.
STD DEV	.3 0.0	12.3 7.7	0.0 .0 5.5	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 2 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.5	0.0	0.0	0.0	0.0	.2	12.3	0.0	0.	0.	0.
2	5.3	0.0	0.0	0.0	0.0	.2	10.9	0.0	0.	0.	0.
3	5.4	0.0	0.0	0.0	0.0	.2	18.6	0.0	0.	0.	0.
4	5.5	0.0	0.0	0.0	0.0	.2	29.5	0.0	0.	0.	0.
5	5.4	0.0	0.0	0.0	0.0	.2	21.5	0.0	0.	0.	0.
6	5.6	0.0	0.0	0.0	0.0	.3	17.6	0.0	0.	0.	0.
7	5.7	0.0	0.0	0.0	0.0	.3	17.0	0.0	0.	0.	0.
8	5.6	0.0	0.0	0.0	0.0	.3	39.5	0.0	0.	0.	0.
9	5.7	0.0	0.0	0.0	0.0	.2	16.5	0.0	0.	0.	0.
10	5.3	0.0	0.0	0.0	0.0	.2	12.6	0.0	0.	0.	0.
11	5.7	0.0	0.0	0.0	0.0	.3	20.0	0.0	0.	0.	0.
12	5.6	0.0	0.0	0.0	0.0	.2	8.5	0.0	0.	0.	0.
13	5.9	0.0	0.0	0.0	0.0	.3	18.3	0.0	0.	0.	0.
14	5.9	0.0	0.0	0.0	0.0	.3	20.1	0.0	0.	0.	0.
15	5.7	0.0	0.0	0.0	0.0	.3	14.4	0.0	0.	0.	0.
16	5.8	0.0	0.0	0.0	0.0	.2	30.1	0.0	0.	0.	0.
17	5.7	0.0	0.0	0.0	0.0	.3	16.1	0.0	0.	0.	0.
18	5.9	0.0	0.0	0.0	0.0	.2	15.5	0.0	0.	0.	0.
19	5.8	0.0	0.0	0.0	0.0	.3	25.0	0.0	0.	0.	0.
20	5.8	0.0	0.0	0.0	0.0	.2	24.5	0.0	0.	0.	0.
MEAN	5.6	0.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.	0.
STD DEV	.2	0.0	0.0	0.0	0.0	.1	6.3	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPHYRON SPICATUM AT JF STUDY AREA CEDAR MTN. MTN.

DATE 16 JUNE JUN 1980 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.8	0.0	21.0	7.0	0.0	.2	16.7	0.0	0.	0.	35.
2	5.9	0.0	7.0	3.0	0.0	.2	12.5	0.0	0.	0.	20.
3	5.7	0.0	14.0	6.0	0.0	.2	24.3	0.0	0.	0.	35.
4	5.9	10.0	32.0	19.0	0.0	.3	32.5	25.1	3.	2.	42.
5	5.7	0.0	13.0	4.0	0.0	.2	21.5	0.0	0.	0.	6.
6	5.9	0.0	10.0	3.0	0.0	.2	17.6	0.0	0.	0.	28.
7	5.9	0.0	22.0	12.0	0.0	.2	17.5	0.0	0.	0.	105.
8	5.8	10.0	36.0	27.0	0.0	.2	31.0	33.5	6.	5.	220.
9	5.8	0.0	0.0	0.0	14.0	.2	18.1	0.0	0.	0.	38.
10	5.8	9.0	25.0	19.0	0.0	.2	20.1	11.9	0.	1.	46.
11	5.9	10.0	21.0	9.0	0.0	.3	20.5	25.1	4.	3.	58.
12	5.8	0.0	12.0	8.0	0.0	.2	10.6	0.0	0.	0.	20.
13	5.8	10.0	51.0	48.0	0.0	.3	23.9	23.0	4.	3.	130.
14	5.8	0.0	9.0	7.0	0.0	.3	21.3	0.0	0.	0.	38.
15	5.9	0.0	9.0	4.0	0.0	.2	18.1	0.0	0.	0.	23.
16	5.9	10.0	34.0	20.0	0.0	.2	30.0	34.5	4.	13.	123.
17	5.9	10.0	38.0	9.0	0.0	.2	18.9	10.0	3.	2.	135.
18	5.9	10.0	31.0	11.0	0.0	.2	19.3	14.5	4.	3.	27.
19	5.9	10.0	17.0	11.0	0.0	.2	21.6	23.5	2.	2.	73.
20	5.8	10.0	27.0	19.0	0.0	.2	31.6	24.5	4.	12.	105.

SIX LEAVES PRES.

MEAN 5.8 9.9 22.6 12.9 14.0 19.2 21.4 22.6 24.3 4.5 68.

STD DEV 0.1 0.3 12.1 10.9 0.0 0.0 6.0 3.3 1.3 14. 54.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	0.0	0.0	0.0	0.0	.2	17.6	0.0	0.	0.	0.
2	5.9	0.0	0.0	0.0	0.0	.2	11.6	0.0	0.	0.	0.
3	5.9	0.0	0.0	0.0	0.0	.2	19.1	0.0	0.	0.	0.
4	5.9	11.0	0.0	0.0	0.0	.2	27.5	42.1	0.	0.	0.
5	5.9	0.0	0.0	0.0	0.0	.2	18.5	0.0	0.	0.	0.
6	5.9	10.0	0.0	0.0	0.0	.2	25.5	27.3	0.	0.	0.
7	5.9	12.0	0.0	0.0	0.0	.2	20.2	45.9	0.	0.	0.
8	5.9	12.0	0.0	0.0	0.0	.2	30.5	48.5	0.	0.	0.
9	5.9	12.0	0.0	0.0	0.0	.2	18.6	30.6	0.	0.	0.
10	5.9	10.0	0.0	0.0	0.0	.2	18.9	17.5	0.	0.	0.
11	5.9	12.0	0.0	0.0	0.0	.3	20.5	40.1	0.	0.	0.
12	5.9	0.0	0.0	0.0	0.0	.2	9.6	0.0	0.	0.	0.
13	5.9	12.0	0.0	0.0	0.0	.2	13.9	33.5	0.	0.	0.
14	5.9	0.0	0.0	0.0	0.0	.3	28.2	0.0	0.	0.	0.
15	5.9	0.0	0.0	0.0	0.0	.2	18.3	0.0	0.	0.	0.
16	5.9	12.0	0.0	0.0	0.0	.3	38.2	57.6	0.	0.	0.
17	5.9	10.0	0.0	0.0	0.0	.3	20.9	13.8	0.	0.	0.
18	5.9	10.0	0.0	0.0	0.0	.2	18.3	17.5	0.	0.	0.
19	5.9	11.0	0.0	0.0	0.0	.3	26.2	42.3	0.	0.	0.
20	5.9	12.0	0.0	0.0	0.0	.3	27.8	38.3	0.	0.	0.
MEAN	5.9	11.2	0.0	0.0	0.0	.2	21.5	35.0	0.	0.	0.
STD DEV	.0	.9	0.0	0.0	0.0	.0	6.8	13.2	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	0.0	0.0	0.0	0.0	.3	18.5	0.0	0.	0.	0.
2	5.9	0.0	0.0	0.0	0.0	.2	9.4	0.0	0.	0.	0.
3	5.9	0.0	0.0	0.0	0.0	.3	20.3	0.0	0.	0.	0.
4	5.9	11.0	0.0	0.0	0.0	.3	28.5	43.0	0.	0.	0.
5	5.9	11.0	0.0	0.0	0.0	.3	21.5	25.9	0.	0.	0.
6	5.9	10.0	0.0	0.0	0.0	.3	17.8	19.5	0.	0.	0.
7	5.9	11.0	0.0	0.0	0.0	.3	17.5	46.9	0.	0.	0.
8	5.9	11.0	0.0	0.0	0.0	.3	30.5	47.0	0.	0.	0.
9	5.9	14.0	0.0	0.0	0.0	.2	18.5	36.5	0.	0.	0.
10	5.9	11.0	0.0	0.0	0.0	.2	11.4	29.5	0.	0.	0.
11	5.9	11.0	0.0	0.0	0.0	.2	22.2	41.3	0.	0.	0.
12	5.9	0.0	0.0	0.0	0.0	.2	11.5	0.0	0.	0.	0.
13	5.9	12.0	0.0	0.0	0.0	.3	15.3	35.1	0.	0.	0.
14	5.9	11.0	0.0	0.0	0.0	.3	27.4	22.4	0.	0.	0.
15	5.9	0.0	0.0	0.0	0.0	.2	17.5	0.0	0.	0.	0.
16	5.9	12.0	0.0	0.0	0.0	.2	29.6	55.9	0.	0.	0.
17	5.9	11.0	0.0	0.0	0.0	.2	19.1	16.5	0.	0.	0.
18	5.9	11.0	0.0	0.0	0.0	.2	21.2	17.2	0.	0.	0.
19	5.9	12.0	0.0	0.0	0.0	.2	26.5	45.0	0.	0.	0.
20	5.9	14.0	0.0	0.0	0.0	.3	23.6	40.5	0.	0.	0.
MEAN	5.9	11.5	0.0	0.0	0.0	.3	20.4	34.8	0.	0.	0.
STD DEV	.7	1.1	0.0	0.0	0.0	.1	6.0	12.3	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 28 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	0.0	21.0	8.0	0.0	.2	17.3	0.0	0.	0.	30.
2	5.9	0.0	4.0	2.0	0.0	.2	11.1	0.0	0.	0.	7.
3	6.0	0.0	13.0	5.0	0.0	.2	20.3	0.0	0.	0.	25.
4	5.9	16.0	31.0	20.0	0.0	.3	24.9	42.0	7.	1.	40.
5	5.9	15.0	9.0	4.0	0.0	.3	20.5	25.4	4.	1.	12.
6	6.0	15.0	49.0	31.0	0.0	.3	25.1	32.5	5.	15.	80.
7	5.9	16.0	35.0	22.0	0.0	.2	17.6	44.5	6.	2.	150.
8	5.9	16.0	40.0	28.0	0.0	.3	30.9	49.1	6.	3.	260.
9	6.0	16.0	15.0	14.0	0.0	.3	18.1	37.5	6.	1.	25.
10	6.0	15.0	26.0	22.0	0.0	.3	20.9	31.2	4.	4.	20.
11	5.9	16.0	15.0	8.0	0.0	.3	22.7	42.0	6.	3.	40.
12	5.9	0.0	12.0	10.0	0.0	.2	10.6	0.0	0.	0.	16.
13	6.0	16.0	50.0	22.0	0.0	.2	13.9	34.2	6.	4.	95.
14	5.9	0.0	7.0	4.0	0.0	.2	21.6	0.0	0.	0.	30.
15	6.1	0.0	5.0	2.0	0.0	.2	16.5	0.0	0.	0.	12.
16	5.9	16.0	31.0	20.0	0.0	.3	30.5	53.1	9.	9.	110.
17	5.9	0.0	39.0	10.0	0.0	.2	19.1	0.0	0.	0.	105.
18	6.0	16.0	29.0	13.0	0.0	.2	17.1	20.3	4.	10.	100.
19	5.9	16.0	25.0	10.0	0.0	.2	26.1	45.0	7.	1.	35.
20	6.1	15.0	28.0	15.0	0.0	.2	26.5	37.5	7.	8.	56.
MEAN	5.9	15.8	24.2	13.5	0.0	.2	20.7	38.1	6.	5.	65.
STD DEV	.1	.4	14.1	6.7	0.0	.1	5.6	9.3	1.	4.	62.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 11 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.0	0.0	0.0	0.0	0.0	.3	18.8	0.0	0.	0.	0.
2	6.2	0.0	0.0	0.0	0.0	.2	18.2	0.0	0.	0.	0.
3	6.1	0.0	0.0	0.0	0.0	.2	14.2	0.0	0.	0.	0.
4	6.1	16.0	0.0	0.0	0.0	.3	21.6	41.7	0.	0.	0.
5	6.2	16.0	0.0	0.0	0.0	.2	21.1	25.3	0.	0.	0.
6	6.0	16.0	0.0	0.0	0.0	.2	20.0	30.5	0.	0.	0.
7	6.1	16.0	0.0	0.0	0.0	.2	20.3	17.5	0.	0.	0.
8	6.2	0.0	0.0	0.0	0.0	.2	13.4	0.0	0.	0.	0.
9	6.3	16.0	0.0	0.0	0.0	.3	32.8	47.5	0.	0.	0.
10	6.4	16.0	0.0	0.0	0.0	.2	19.2	27.2	0.	0.	0.
11	6.1	16.0	0.0	0.0	0.0	.2	22.0	42.2	0.	0.	0.
12	6.2	0.0	0.0	0.0	0.0	.1	11.8	0.0	0.	0.	0.
13	6.2	16.0	0.0	0.0	0.0	.2	21.9	34.5	0.	0.	0.
14	6.3	0.0	0.0	0.0	0.0	.2	21.6	0.0	0.	0.	0.
15	6.2	0.0	0.0	0.0	0.0	.2	18.6	0.0	0.	0.	0.
16	6.2	16.0	0.0	0.0	0.0	.2	28.5	58.3	0.	0.	0.
17	6.2	0.0	0.0	0.0	0.0	.2	18.7	0.0	0.	0.	0.
18	6.3	16.0	0.0	0.0	0.0	.2	18.6	14.5	0.	0.	0.
19	6.3	16.0	0.0	0.0	0.0	.2	27.3	44.5	0.	0.	0.
20	6.2	16.0	0.0	0.0	0.0	.3	22.1	40.6	0.	0.	0.
MEAN	6.2	16.0	0.0	0.0	0.0	.2	20.5	35.4	0.	0.	0.
STD DEV	.1	9.0	0.0	0.0	0.0	.0	4.9	12.9	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. RFR CULM	NO. VEG CULM
1	6.4	0.0	0.0	0.0	0.0	.2	13.0	0.0	0.	0.	0.
2	6.5	15.9	0.0	0.0	0.0	.2	12.0	2.5	3.	0.	0.
3	6.5	0.0	0.0	0.0	0.0	.1	18.0	0.0	0.	0.	0.
4	6.4	15.9	0.0	0.0	0.0	.2	45.0	9.0	8.	0.	0.
5	6.3	15.9	0.0	0.0	0.0	.2	24.0	2.5	3.	0.	0.
6	6.4	16.0	0.0	0.0	0.0	.2	21.0	4.5	4.	0.	0.
7	6.4	0.0	0.0	0.0	0.0	.2	14.8	0.0	0.	0.	0.
8	6.4	16.9	0.0	0.0	0.0	.2	23.0	6.5	5.	0.	0.
9	6.2	0.0	0.0	0.0	0.0	.2	16.0	0.0	0.	0.	0.
10	6.2	15.9	0.0	0.0	0.0	.2	29.5	4.5	5.	0.	0.
11	6.3	16.7	0.0	0.0	0.0	.2	21.0	4.5	5.	0.	0.
12	6.2	0.0	0.0	0.0	0.0	.1	8.5	0.0	0.	0.	0.
13	6.3	0.0	0.0	0.0	0.0	.1	14.5	0.0	0.	0.	0.
14	6.4	0.0	0.0	0.0	0.0	.2	17.5	0.0	0.	0.	0.
15	6.4	0.0	0.0	0.0	0.0	.1	8.0	0.0	0.	0.	0.
16	6.3	16.6	0.0	0.0	0.0	.2	29.4	0.0	10.	0.	0.
17	6.2	0.0	0.0	0.0	0.0	.2	13.5	11.5	0.	0.	0.
18	6.5	16.8	0.0	0.0	0.0	.1	15.5	5.5	6.	0.	0.
19	6.4	16.9	0.0	0.0	0.0	.2	25.5	6.0	6.	0.	0.
20	6.3	16.1	0.0	0.0	0.0	.2	24.0	7.0	7.	0.	0.
MEAN	6.3	16.5	0.0	0.0	0.0	.2	19.7	5.8	6.	0.	0.
STD DEV	.1	.4	0.0	0.0	0.0	.0	8.6	2.7	2.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.6	0.0	0.0	0.0	0.0	.1	13.5	0.0	0.	0.	0.
2	6.6	0.0	0.0	0.0	0.0	.2	14.0	0.0	0.	0.	0.
3	6.7	0.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.	0.
4	6.5	16.0	0.0	0.0	0.0	.2	24.0	0.0	0.	0.	0.
5	6.4	16.0	0.0	0.0	0.0	.2	24.0	0.0	0.	0.	0.
6	6.3	16.0	0.0	0.0	0.0	.2	23.0	0.0	0.	0.	0.
7	6.4	0.0	0.0	0.0	0.0	.2	17.5	0.0	0.	0.	0.
8	6.5	16.0	0.0	0.0	0.0	.2	29.0	0.0	0.	0.	0.
9	6.4	16.0	0.0	0.0	0.0	.2	16.0	0.0	0.	0.	0.
10	6.4	16.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.	0.
11	6.5	16.0	0.0	0.0	0.0	.2	16.5	0.0	0.	0.	0.
12	6.3	0.0	0.0	0.0	0.0	.2	11.0	0.0	0.	0.	0.
13	6.5	0.0	0.0	0.0	0.0	.2	13.0	0.0	0.	0.	0.
14	6.8	0.0	0.0	0.0	0.0	.2	17.5	0.0	0.	0.	0.
15	6.4	0.0	0.0	0.0	0.0	.2	13.7	0.0	0.	0.	0.
16	6.4	16.0	0.0	0.0	0.0	.2	27.0	0.0	0.	0.	0.
17	6.4	0.0	0.0	0.0	0.0	.2	13.2	0.0	0.	0.	0.
18	6.4	16.0	0.0	0.0	0.0	.2	15.0	0.0	0.	0.	0.
19	6.4	16.0	0.0	0.0	0.0	.2	26.0	0.0	0.	0.	0.
20	6.6	16.0	0.0	0.0	0.0	.2	22.3	0.0	0.	0.	0.
MEAN	6.5	16.0	0.0	0.0	0.0	.2	18.7	0.0	0.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.0	5.3	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 20 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.0	0.0	10.0	5.0	0.0	.2	22.2	0.0	0.	0.	45.
2	4.3	0.0	26.0	7.0	0.0	.2	25.6	0.0	0.	0.	70.
3	4.3	0.0	9.0	8.0	0.0	.2	20.2	0.0	0.	0.	35.
4	4.7	0.0	17.0	14.0	0.0	.2	24.5	0.0	0.	0.	75.
5	4.4	0.0	60.0	5.0	0.0	.2	14.0	0.0	0.	0.	14.
6	4.8	0.0	4.0	3.0	0.0	.2	16.1	0.0	0.	0.	5.
7	4.6	0.0	21.0	11.0	0.0	.2	25.0	0.0	0.	0.	40.
8	4.9	0.0	20.0	8.0	0.0	.2	23.2	0.0	0.	0.	47.
9	4.7	0.0	15.0	6.0	0.0	.2	19.1	0.0	0.	0.	30.
10	4.8	0.0	3.0	2.0	0.0	.2	15.1	0.0	0.	0.	15.
11	4.4	0.0	19.0	14.0	0.0	.2	14.8	0.0	0.	0.	55.
12	4.8	0.0	21.0	15.0	0.0	.2	18.1	0.0	0.	0.	90.
13	4.3	0.0	12.0	5.0	0.0	.2	20.2	0.0	0.	0.	55.
14	4.3	0.0	18.0	9.0	0.0	.2	20.9	0.0	0.	0.	30.
15	4.8	0.0	7.0	4.0	0.0	.2	19.4	0.0	0.	0.	12.
16	4.5	0.0	6.0	6.0	0.0	.2	10.3	0.0	0.	0.	25.
17	5.1	0.0	14.0	10.0	0.0	.3	25.1	0.0	0.	0.	60.
18	4.7	0.0	2.0	2.0	0.0	.2	6.5	0.0	0.	0.	3.
19	4.8	0.0	10.0	8.0	0.0	.2	16.7	0.0	0.	0.	20.
20	5.2	0.0	9.0	6.0	0.0	.3	24.5	0.0	0.	0.	20.

MEAN	4.6	0.0	15.2	7.4	0.0	.2	19.2	0.0	0.	0.	37.
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STD DEV	.3	0.0	12.5	3.8	0.0	.0	5.0	0.0	0.	0.	24.
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0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 11 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.7	0.0	0.0	0.0	0.0	.2	28.5	0.0	0.	0.	0.
2	5.8	0.0	0.0	0.0	0.0	.3	36.2	0.0	0.	0.	0.
3	5.8	0.0	0.0	0.0	0.0	.3	31.2	0.0	0.	0.	0.
4	5.9	0.0	0.0	0.0	0.0	.2	30.6	0.0	0.	0.	0.
5	5.7	0.0	0.0	0.0	0.0	.3	30.5	0.0	0.	0.	0.
6	5.7	0.0	0.0	0.0	0.0	.2	24.2	0.0	0.	0.	0.
7	5.8	0.0	0.0	0.0	0.0	.3	33.9	0.0	0.	0.	0.
8	5.7	0.0	0.0	0.0	0.0	.2	30.6	0.0	0.	0.	0.
9	5.6	0.0	0.0	0.0	0.0	.3	32.5	0.0	0.	0.	0.
10	5.4	0.0	0.0	0.0	0.0	.3	26.5	0.0	0.	0.	0.
11	5.6	0.0	0.0	0.0	0.0	.3	34.6	0.0	0.	0.	0.
12	5.5	0.0	0.0	0.0	0.0	.3	26.2	0.0	0.	0.	0.
13	5.6	0.0	0.0	0.0	0.0	.3	30.2	0.0	0.	0.	0.
14	5.5	0.0	0.0	0.0	0.0	.3	30.3	0.0	0.	0.	0.
15	5.8	0.0	0.0	0.0	0.0	.3	37.4	0.0	0.	0.	0.
16	5.6	0.0	0.0	0.0	0.0	.2	19.7	0.0	0.	0.	0.
17	5.7	0.0	0.0	0.0	0.0	.3	40.5	0.0	0.	0.	0.
18	5.5	0.0	0.0	0.0	0.0	.2	25.6	0.0	0.	0.	0.
19	5.6	0.0	0.0	0.0	0.0	.2	25.1	0.0	0.	0.	0.
20	5.8	0.0	0.0	0.0	0.0	.3	30.6	0.0	0.	0.	0.
MEAN	5.7	0.0	0.0	0.0	0.0	.3	30.2	0.0	0.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.0	4.9	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 17 JUNE 1981

PLANT NO.	PHENOLOGICAL STAGE	SCORE	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
VEG.	REPR.										
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	5.4	0.0	22.0	13.0	0.0	.2	28.4	0.0	0.	0.	120.
2	5.8	0.0	29.0	10.0	0.0	.2	38.9	0.0	0.	0.	106.
3	5.5	0.0	0.0	0.0	9.0	.2	37.6	0.0	0.	0.	64.
4	5.6	0.0	4.0	3.0	0.0	.2	21.3	0.0	0.	0.	12.
5	5.5	0.0	3.0	2.0	0.0	.2	26.9	0.0	0.	0.	5.
6	5.4	0.0	10.0	4.0	0.0	.2	23.9	0.0	0.	0.	15.
7	5.5	0.0	26.0	12.0	0.0	.2	33.0	0.0	0.	0.	48.
8	5.6	0.0	10.0	7.0	0.0	.2	31.3	0.0	0.	0.	22.
9	5.7	0.0	13.0	8.0	0.0	.2	30.4	0.0	0.	0.	48.
10	5.8	0.0	11.0	7.0	0.0	.2	29.8	0.0	0.	0.	19.
11	5.8	0.0	22.0	15.0	0.0	.2	34.5	0.0	0.	0.	120.
12	5.6	0.0	25.0	18.0	0.0	.2	28.4	0.0	0.	0.	72.
13	5.9	0.0	14.0	7.0	0.0	.2	28.0	0.0	0.	0.	23.
14	5.8	0.0	20.0	16.0	0.0	.2	31.3	0.0	0.	0.	44.
15	5.8	0.0	8.0	4.0	0.0	.2	32.6	0.0	0.	0.	9.
16	5.8	0.0	10.0	5.0	0.0	.2	19.8	0.0	0.	0.	18.
17	5.8	0.0	18.0	13.0	0.0	.2	33.5	0.0	0.	0.	56.
18	5.7	0.0	6.0	4.0	0.0	.2	27.3	0.0	0.	0.	8.
19	5.7	0.0	9.0	5.0	0.0	.2	29.0	0.0	0.	0.	20.
20	5.8	0.0	11.0	6.0	0.0	.2	35.5	0.0	0.	0.	36.
MEAN	5.7	0.0	14.3	8.4	9.0	.2	30.1	0.0	0.	0.	44.
STD DEV	.2	0.0	7.8	4.8	0.0	.0	4.9	0.0	0.	0.	37.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	0.0	0.0	0.0	0.0	.3	28.9	0.0	0.	0.	0.
2	5.9	10.0	0.0	0.0	0.0	.3	40.5	49.6	0.	0.	0.
3	5.9	0.0	0.0	0.0	0.0	.3	39.1	0.0	0.	0.	0.
4	5.9	0.0	0.0	0.0	0.0	.3	29.1	0.0	0.	0.	0.
5	5.9	0.0	0.0	0.0	0.0	.3	39.1	0.0	0.	0.	0.
6	5.9	0.0	0.0	0.0	0.0	.4	32.1	0.0	0.	0.	0.
7	5.9	0.0	0.0	0.0	0.0	.3	35.7	0.0	0.	0.	0.
8	5.9	0.0	0.0	0.0	0.0	.3	32.1	0.0	0.	0.	0.
9	5.9	0.0	0.0	0.0	0.0	.3	33.6	0.0	0.	0.	0.
10	5.9	0.0	0.0	0.0	0.0	.3	31.5	0.0	0.	0.	0.
11	5.9	0.0	0.0	0.0	0.0	.3	35.9	0.0	0.	0.	0.
12	5.9	0.0	0.0	0.0	0.0	.3	29.1	0.0	0.	0.	0.
13	5.9	0.0	0.0	0.0	0.0	.3	27.3	0.0	0.	0.	0.
14	5.9	0.0	0.0	0.0	0.0	.4	31.2	0.0	0.	0.	0.
15	5.9	0.0	0.0	0.0	0.0	.3	35.2	0.0	0.	0.	0.
16	5.9	0.0	0.0	0.0	0.0	.3	21.2	0.0	0.	0.	0.
17	5.9	0.0	0.0	0.0	0.0	.3	37.8	0.0	0.	0.	0.
18	5.9	0.0	0.0	0.0	0.0	.3	18.3	0.0	0.	0.	0.
19	5.9	0.0	0.0	0.0	0.0	.3	24.9	0.0	0.	0.	0.
20	5.9	0.0	0.0	0.0	0.0	.4	32.9	0.0	0.	0.	0.
MEAN	5.9	10.0	0.0	0.0	0.0	.3	31.8	49.6	0.	0.	0.
STD DEV	.0	0.0	0.0	0.0	0.0	.0	5.9	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 15 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	0.0	0.0	0.0	0.0	.3	30.4	0.0	0.	0.	0.
2	5.9	12.0	0.0	0.0	0.0	.3	38.9	49.2	0.	0.	0.
3	5.9	0.0	0.0	0.0	0.0	.3	39.9	0.0	0.	0.	0.
4	5.9	0.0	0.0	0.0	0.0	.3	34.9	0.0	0.	0.	0.
5	5.9	0.0	0.0	0.0	0.0	.3	37.1	0.0	0.	0.	0.
6	5.9	0.0	0.0	0.0	0.0	.3	23.9	0.0	0.	0.	0.
7	5.9	0.0	0.0	0.0	0.0	.3	33.6	0.0	0.	0.	0.
8	5.9	0.0	0.0	0.0	0.0	.3	32.5	0.0	0.	0.	0.
9	5.9	0.0	0.0	0.0	0.0	.3	34.0	0.0	0.	0.	0.
10	5.9	0.0	0.0	0.0	0.0	.3	30.1	0.0	0.	0.	0.
11	5.9	0.0	0.0	0.0	0.0	.3	33.7	0.0	0.	0.	0.
12	5.9	0.0	0.0	0.0	0.0	.3	29.5	0.0	0.	0.	0.
13	5.9	0.0	0.0	0.0	0.0	.3	30.6	0.0	0.	0.	0.
14	5.9	0.0	0.0	0.0	0.0	.3	30.8	0.0	0.	0.	0.
15	5.9	0.0	0.0	0.0	0.0	.3	34.9	0.0	0.	0.	0.
16	5.9	0.0	0.0	0.0	0.0	.3	21.3	0.0	0.	0.	0.
17	5.9	0.0	0.0	0.0	0.0	.3	37.9	0.0	0.	0.	0.
18	5.9	0.0	0.0	0.0	0.0	.3	39.0	0.0	0.	0.	0.
19	5.9	0.0	0.0	0.0	0.0	.3	38.6	0.0	0.	0.	0.
20	5.9	0.0	0.0	0.0	0.0	.3	32.2	0.0	0.	0.	0.
MEAN	5.9	12.0	0.0	0.0	0.0	.3	33.2	49.2	0.	0.	0.
STD DEV	.0	0.0	0.0	0.0	0.0	.0	4.9	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 4 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.1	0.0	21.0	12.0	0.0	.2	26.7	0.0	0.	0.	104.
2	6.1	16.0	23.0	7.0	0.0	.3	38.6	46.0	6.	1.	120.
3	6.2	0.0	10.0	10.0	0.0	.2	38.4	0.0	0.	0.	55.
4	6.3	0.0	18.0	14.0	0.0	.2	30.3	0.0	0.	0.	130.
5	6.3	0.0	9.0	3.0	0.0	.2	36.7	0.0	0.	0.	13.
6	6.3	0.0	8.0	5.0	0.0	.2	21.0	0.0	0.	0.	12.
7	6.2	0.0	21.0	10.0	0.0	.2	31.9	0.0	0.	0.	70.
8	6.1	0.0	8.0	5.0	0.0	.2	30.6	0.0	0.	0.	25.
9	6.3	0.0	13.0	6.0	0.0	.2	31.6	0.0	0.	0.	55.
10	6.1	0.0	3.0	2.0	0.0	.2	27.3	0.0	0.	0.	14.
11	6.3	0.0	19.0	17.0	0.0	.3	34.2	0.0	0.	0.	200.
12	6.2	0.0	19.0	14.0	0.0	.2	30.8	0.0	0.	0.	140.
13	6.3	0.0	13.0	6.0	0.0	.2	30.4	0.0	0.	0.	33.
14	6.3	0.0	13.0	13.0	0.0	.2	30.6	0.0	0.	0.	40.
15	6.1	0.0	5.0	2.0	0.0	.3	33.6	0.0	0.	0.	8.
16	6.3	0.0	5.0	3.0	0.0	.2	21.2	0.0	0.	0.	20.
17	6.2	0.0	16.0	9.0	0.0	.3	32.6	0.0	0.	0.	70.
18	6.2	0.0	11.0	4.0	0.0	.2	38.1	0.0	0.	0.	21.
19	6.2	0.0	18.0	13.0	0.0	.2	25.3	0.0	0.	0.	60.
20	6.1	0.0	7.0	4.0	0.0	.3	31.4	0.0	0.	0.	25.
MEAN	6.2	16.0	13.0	8.0	0.0	.2	31.1	46.0	6.	1.	61.
STD DEV	.1	0.0	6.1	4.6	0.0	.0	5.0	0.0	0.	0.	53.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 12 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.3	0.0	0.0	0.0	0.0	.2	29.1	0.0	0.	0.	0.
2	6.3	16.0	0.0	0.0	0.0	.2	39.5	49.0	0.	0.	0.
3	6.2	0.0	0.0	0.0	0.0	.2	37.4	0.0	0.	0.	0.
4	6.5	0.0	0.0	0.0	0.0	.2	29.4	0.0	0.	0.	0.
5	6.5	0.0	0.0	0.0	0.0	.2	36.5	0.0	0.	0.	0.
6	6.3	0.0	0.0	0.0	0.0	.2	26.2	0.0	0.	0.	0.
7	6.3	0.0	0.0	0.0	0.0	.2	35.5	0.0	0.	0.	0.
8	6.3	0.0	0.0	0.0	0.0	.2	32.9	0.0	0.	0.	0.
9	6.5	0.0	0.0	0.0	0.0	.2	32.5	0.0	0.	0.	0.
10	6.2	0.0	0.0	0.0	0.0	.2	27.6	0.0	0.	0.	0.
11	6.5	0.0	0.0	0.0	0.0	.2	32.6	0.0	0.	0.	0.
12	6.4	0.0	0.0	0.0	0.0	.2	29.2	0.0	0.	0.	0.
13	6.4	0.0	0.0	0.0	0.0	.2	30.7	0.0	0.	0.	0.
14	6.4	0.0	0.0	0.0	0.0	.3	30.2	0.0	0.	0.	0.
15	6.2	0.0	0.0	0.0	0.0	.3	33.9	0.0	0.	0.	0.
16	6.5	0.0	0.0	0.0	0.0	.2	20.9	0.0	0.	0.	0.
17	6.2	0.0	0.0	0.0	0.0	.2	37.8	0.0	0.	0.	0.
18	6.3	0.0	0.0	0.0	0.0	.2	36.2	0.0	0.	0.	0.
19	6.4	0.0	0.0	0.0	0.0	.2	28.6	0.0	0.	0.	0.
20	6.4	0.0	0.0	0.0	0.0	.2	33.1	0.0	0.	0.	0.
MEAN	6.4	16.0	0.0	0.0	0.0	.2	32.1	49.0	0.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.0	4.7	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 31 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.4	0.0	0.0	0.0	0.0	.2	24.5	0.0	0.	0.	0.
2	6.3	16.0	0.0	0.0	0.0	.1	32.0	6.5	6.	0.	0.
3	6.5	0.0	0.0	0.0	0.0	.1	38.0	0.0	0.	0.	0.
4	6.6	0.0	0.0	0.0	0.0	.2	21.5	0.0	0.	0.	0.
5	6.4	0.0	0.0	0.0	0.0	.2	27.5	0.0	0.	0.	0.
6	6.6	0.0	0.0	0.0	0.0	.2	24.0	0.0	0.	0.	0.
7	6.5	0.0	0.0	0.0	0.0	.2	32.0	0.0	0.	0.	0.
8	6.8	0.0	0.0	0.0	0.0	.1	26.0	0.0	0.	0.	0.
9	6.5	0.0	0.0	0.0	0.0	.1	27.5	0.0	0.	0.	0.
10	6.7	0.0	0.0	0.0	0.0	.1	24.0	0.0	0.	0.	0.
11	6.4	0.0	0.0	0.0	0.0	.1	26.0	0.0	0.	0.	0.
12	6.5	0.0	0.0	0.0	0.0	.2	21.5	0.0	0.	0.	0.
13	6.3	0.0	0.0	0.0	0.0	.2	23.5	0.0	0.	0.	0.
14	6.6	0.0	0.0	0.0	0.0	.2	28.0	0.0	0.	0.	0.
15	6.3	0.0	0.0	0.0	0.0	.2	32.0	0.0	0.	0.	0.
16	6.5	0.0	0.0	0.0	0.0	.2	20.5	0.0	0.	0.	0.
17	6.4	0.0	0.0	0.0	0.0	.3	28.0	0.0	0.	0.	0.
18	6.4	0.0	0.0	0.0	0.0	.1	25.5	0.0	0.	0.	0.
19	6.4	0.0	0.0	0.0	0.0	.2	24.5	0.0	0.	0.	0.
20	6.4	0.0	0.0	0.0	0.0	.2	27.5	0.0	0.	0.	0.
MEAN	6.5	16.0	0.0	0.0	0.0	.2	26.7	6.5	6.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.1	4.3	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA CUMBER. 3

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
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1	6.5	0.0	0.0	0.0	0.0	.2	28.0	0.0	0.	0.	0.
2	6.6	0.0	0.0	0.0	0.0	.2	18.5	0.0	0.	0.	0.
3	6.5	0.0	0.0	0.0	0.0	.2	35.5	0.0	0.	0.	0.
4	6.6	0.0	0.0	0.0	0.0	.2	27.5	0.0	0.	0.	0.
5	6.7	0.0	0.0	0.0	0.0	.2	35.5	0.0	0.	0.	0.
6	6.6	0.0	0.0	0.0	0.0	.2	28.0	0.0	0.	0.	0.
7	6.7	0.0	0.0	0.0	0.0	.2	33.5	0.0	0.	0.	0.
8	6.7	0.0	0.0	0.0	0.0	.2	40.2	0.0	0.	0.	0.
9	6.5	0.0	0.0	0.0	0.0	.1	30.0	0.0	0.	0.	0.
10	6.6	0.0	0.0	0.0	0.0	.1	26.3	0.0	0.	0.	0.
11	6.5	0.0	0.0	0.0	0.0	.1	26.3	0.0	0.	0.	0.
12	6.4	0.0	0.0	0.0	0.0	.2	26.5	0.0	0.	0.	0.
13	6.5	0.0	0.0	0.0	0.0	.2	23.5	0.0	0.	0.	0.
14	6.6	0.0	0.0	0.0	0.0	.2	31.2	0.0	0.	0.	0.
15	6.3	0.0	0.0	0.0	0.0	.2	30.0	0.0	0.	0.	0.
16	6.5	0.0	0.0	0.0	0.0	.1	19.5	0.0	0.	0.	0.
17	6.5	0.0	0.0	0.0	0.0	.2	33.0	0.0	0.	0.	0.
18	6.4	0.0	0.0	0.0	0.0	.2	35.5	0.0	0.	0.	0.
19	6.6	0.0	0.0	0.0	0.0	.1	23.1	0.0	0.	0.	0.
20	6.4	0.0	0.0	0.0	0.0	.2	29.3	0.0	0.	0.	0.

MEAN	6.5	0.0	0.0	0.0	0.0	.2	29.0	0.0	0.	0.	0.
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STD DEV	.1	0.0	0.0	0.0	0.0	.0	5.6	0.0	0.	0.	0.
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0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 4 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	3.4	0.0	18.0	8.0	0.0	.2	11.0	0.0	0.	0.	0.
2	4.3	0.0	42.0	21.0	0.0	.3	11.5	0.0	0.	0.	3B
3	4.3	0.0	20.0	17.0	0.0	.3	7.5	0.0	0.	0.	4C
4	4.6	0.0	52.0	23.0	0.0	.2	6.0	0.0	0.	0.	3C
5	3.5	0.0	19.0	19.0	0.0	.2	3.6	0.0	0.	0.	4D
6	4.2	0.0	12.0	9.0	0.0	.3	6.7	0.0	0.	0.	4C
MEAN	4.1	0.0	27.2	16.2	0.0	.3	7.7	0.0	0.	0.	0.
STD DEV	.5	0.0	15.9	6.3	0.0	.1	3.0	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 27 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.5	0.0	0.0	0.0	0.0	.2	22.0	0.0	0.	0.	0.
2	4.6	0.0	0.0	0.0	0.0	.2	21.0	0.0	0.	0.	0.
3	4.2	0.0	0.0	0.0	0.0	.3	17.0	0.0	0.	0.	0.
4	4.9	0.0	0.0	0.0	0.0	.3	21.0	0.0	0.	0.	0.
5	4.8	0.0	0.0	0.0	0.0	.2	24.0	0.0	0.	0.	0.
6	4.1	0.0	0.0	0.0	0.0	.3	17.0	0.0	0.	0.	0.
MEAN	4.5	0.0	0.0	0.0	0.0	.3	20.3	0.0	0.	0.	0.
STD DEV	.3	0.0	0.0	0.0	0.0	.1	2.8	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.5	0.0	23.0	13.0	0.0	.3	17.3	0.0	0.	0.	47.
2	5.3	0.0	46.0	35.0	0.0	.3	19.8	0.0	0.	0.	145.
3	4.8	0.0	40.0	25.0	0.0	.2	14.5	0.0	0.	0.	55.
4	4.9	0.0	53.0	39.0	0.0	.3	27.1	0.0	0.	0.	80.
5	5.2	0.0	30.0	22.0	0.0	.3	17.6	0.0	0.	0.	115.
6	5.3	0.0	0.0	0.0	15.0	.3	19.8	0.0	0.	0.	42.
MEAN	5.0	0.0	38.8	26.8	15.0	.3	19.4	0.0	0.	0.	81.
STD DEV	.3	0.0	12.4	10.4	0.0	.0	4.3	0.0	0.	0.	41.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 23 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	5.6	0.0	0.0	0.0	0.0	.2	28.2	0.0	0.	0.	0.
2	5.7	10.0	0.0	0.0	0.0	.3	35.1	30.1	0.	16.	0.
3	5.9	0.0	0.0	0.0	0.0	.3	25.1	0.0	0.	0.	0.
4	5.9	0.0	0.0	0.0	0.0	.3	29.4	0.0	0.	0.	0.
5	5.5	0.0	0.0	0.0	0.0	.3	31.2	0.0	0.	0.	0.
6	5.5	0.0	0.0	0.0	0.0	.3	24.9	0.0	0.	0.	0.
MEAN	5.7	10.0	0.0	0.0	0.0	.3	29.0	30.1	0.	16.	0.
STD DEV	.2	0.0	0.0	0.0	0.0	.0	3.9	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	5.3	0.0	0.0	0.0	0.0	.3	19.5	0.0	0.	0.	0.
2	5.2	10.0	0.0	0.0	0.0	.3	34.5	42.4	0.	0.	0.
3	5.8	0.0	0.0	0.0	0.0	.3	24.9	0.0	0.	0.	0.
4	5.5	0.0	0.0	0.0	0.0	.3	35.3	0.0	0.	0.	0.
5	5.8	0.0	0.0	0.0	0.0	.3	29.1	0.0	0.	0.	0.
6	5.8	0.0	0.0	0.0	0.0	.3	26.1	0.0	0.	0.	0.
MEAN	5.6	10.0	0.0	0.0	0.0	.3	28.2	42.4	0.	0.	0.
STD DEV	.3	0.0	0.0	0.0	0.0	.0	6.0	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 19 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	5.9	0.0	25.0	13.0	0.0	.2	25.3	0.0	0.	0.	88.	SIX LEAVES PRES.
2	5.9	10.0	42.0	30.0	0.0	.3	33.1	54.5	11.	35.	480.	SIX LEAVES PRES.
3	5.9	0.0	32.0	17.0	0.0	.3	26.4	0.0	0.	0.	200.	SIX LEAVES PRES.
4	5.9	0.0	37.0	26.0	0.0	.3	38.2	0.0	0.	0.	240.	SIX LEAVES PRES.
5	5.9	0.0	19.0	19.0	0.0	.2	39.5	0.0	0.	0.	290.	SIX LEAVES PRES.
6	5.9	0.0	14.0	11.0	0.0	.2	26.1	0.0	0.	0.	96.	SIX LEAVES PRES.
MEAN	5.9	10.0	28.2	19.3	0.0	.3	31.4	54.5	11.	35.	231.	
STD DEV	.0	0.0	10.8	7.4	0.0	.1	6.4	0.0	0.	0.	144.	

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPP.	CLUMP LGTH. WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	5.8 0.0	0.0 0.0	0.0	.3	15.2	0.0	0.	0.	0.
2	5.9 13.0	0.0 0.0	0.0	.3	30.0	40.1	9.	0.	0.
3	5.9 0.0	0.0 0.0	0.0	.3	24.1	0.0	0.	0.	0.
4	5.3 0.0	0.0 0.0	0.0	.3	22.1	0.0	0.	0.	0.
5	5.9 0.0	0.0 0.0	0.0	.3	20.0	0.0	0.	0.	0.
6	5.9 0.0	0.0 0.0	0.0	.3	22.2	0.0	0.	0.	0.
MEAN	5.8 13.0	0.0 0.0	0.0	.3	22.3	40.1	9.	0.	0.
STD DEV	.2 0.0	0.0 0.0	0.0	.0	4.9	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	16.0	0.0	0.0	0.0	.2	23.6	51.2	10.	0.	0.
2	6.1	0.0	0.0	0.0	0.0	.2	30.1	0.0	0.	0.	0.
3	6.1	0.0	0.0	0.0	0.0	.2	31.2	0.0	0.	0.	0.
4	6.2	0.0	0.0	0.0	0.0	.2	26.8	0.0	0.	0.	0.
5	6.1	0.0	0.0	0.0	0.0	.2	25.6	0.0	0.	0.	0.
6	5.8	0.0	0.0	0.0	0.0	.2	28.1	0.0	0.	0.	0.
MEAN	6.0	16.0	0.0	0.0	0.0	.2	27.6	51.2	10.	0.	0.
STD DEV	.2	0.0	0.0	0.0	0.0	.0	2.8	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 26 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.2	16.0	24.0	13.0	0.0	.3	21.4	44.0	6.	5.	80.
2	6.3	15.0	47.0	33.0	0.0	.3	24.0	36.1	4.	75.	200.
3	6.3	0.0	30.0	18.0	0.0	.3	24.2	0.0	0.	0.	120.
4	6.3	0.0	35.0	32.0	0.0	.3	25.0	0.0	0.	0.	220.
5	6.3	0.0	36.0	22.0	0.0	.3	23.0	0.0	0.	0.	130.
6	6.3	0.0	20.0	15.0	0.0	.3	25.1	0.0	0.	0.	70.
MEAN	6.3	15.5	32.0	22.2	0.0	.3	23.8	40.1	5.	40.	137.
STD DEV	.0	.7	9.6	8.6	0.0	.0	1.4	5.6	1.	49.	62.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 21 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	6.7	16.0	0.0	0.0	0.0	.3	28.6	42.8	5.	0.	0.
2	6.6	0.0	0.0	0.0	0.0	.3	29.4	0.0	0.	0.	0.
3	6.6	0.0	0.0	0.0	0.0	.3	29.0	0.0	0.	0.	0.
4	6.6	0.0	0.0	0.0	0.0	.3	34.6	0.0	0.	0.	0.
5	6.7	0.0	0.0	0.0	0.0	.2	24.9	0.0	0.	0.	0.
6	6.6	0.0	0.0	0.0	0.0	.2	25.9	0.0	0.	0.	0.
MEAN	6.6	16.0	0.0	0.0	0.0	.3	28.7	42.8	5.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.1	3.4	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 6 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.8	0.0	0.0	0.0	0.0	.3	12.2	0.0	0.	0.	0.
2	6.9	16.0	0.0	0.0	0.0	.3	37.7	40.6	0.	0.	0.
3	6.8	0.0	0.0	0.0	0.0	.3	21.0	0.0	0.	0.	0.
4	6.8	0.0	0.0	0.0	0.0	.3	24.2	0.0	0.	0.	0.
5	6.8	0.0	0.0	0.0	0.0	.3	8.5	0.0	0.	0.	0.
6	6.8	0.0	0.0	0.0	0.0	.3	19.5	0.0	0.	0.	0.
MEAN	6.8	16.0	0.0	0.0	0.0	.3	20.5	40.6	0.	0.	0.
STD DEV	.0	0.0	0.0	0.0	0.0	.0	10.2	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	7.1	0.0	0.0	0.0	0.0	.2	2.2	0.0	0.	0.	0.
2	7.2	0.0	0.0	0.0	0.0	.3	4.8	0.0	0.	0.	0.
3	7.2	0.0	0.0	0.0	0.0	.3	6.0	0.0	0.	0.	0.
4	7.2	0.0	0.0	0.0	0.0	.3	10.2	0.0	0.	0.	0.
5	7.1	0.0	0.0	0.0	0.0	.3	3.0	0.0	0.	0.	0.
6	7.0	0.0	0.0	0.0	0.0	.2	.8	0.0	0.	0.	0.
MEAN	7.1	0.0	0.0	0.0	0.0	.3	4.5	0.0	0.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.1	3.3	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CK.

DATE 13 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.6	0.0	18.0	15.0	0.0	.3	11.0	0.0	0.	0.	0.
2	4.8	0.0	13.0	12.0	0.0	.3	7.0	0.0	0.	0.	0.
3	4.5	0.0	16.0	11.0	0.0	.3	10.0	0.0	0.	0.	0.
4	4.6	0.0	5.0	3.0	0.0	.2	5.0	0.0	0.	0.	0.
5	4.3	0.0	17.0	17.0	0.0	.3	9.0	0.0	0.	0.	0.
6	3.5	0.0	15.0	12.0	0.0	.2	6.0	0.0	0.	0.	0.
7	3.7	0.0	39.0	10.0	0.0	.3	9.0	0.0	0.	0.	0.
8	3.9	0.0	20.0	13.0	0.0	.2	13.0	0.0	0.	0.	0.
9	4.2	0.0	18.0	8.0	0.0	.2	10.0	0.0	0.	0.	0.
10	4.4	0.0	35.0	19.0	0.0	.3	12.0	0.0	0.	0.	0.
11	4.4	0.0	2.0	1.0	0.0	.2	7.0	0.0	0.	0.	0.
12	4.3	0.0	10.0	9.0	0.0	.3	11.0	0.0	0.	0.	0.
13	4.5	0.0	8.0	4.0	0.0	.3	9.0	0.0	0.	0.	0.
14	3.8	0.0	14.0	7.0	0.0	.2	9.0	0.0	0.	0.	0.
15	3.8	0.0	14.0	9.0	0.0	.2	10.0	0.0	0.	0.	0.
16	3.7	0.0	8.0	2.0	0.0	.2	8.0	0.0	0.	0.	0.
17	3.5	0.0	2.0	2.0	0.0	.2	4.0	0.0	0.	0.	0.
18	3.9	0.0	8.0	4.0	0.0	.2	5.0	0.0	0.	0.	0.
19	3.7	0.0	2.0	2.0	0.0	.2	7.0	0.0	0.	0.	0.
20	4.5	0.0	27.0	18.0	0.0	.2	12.0	0.0	0.	0.	0.
MEAN	4.1	0.0	14.6	8.5	0.0	.2	8.7	0.0	0.	0.	0.
STD DEV	.4	0.0	10.1	5.3	0.0	.1	2.5	0.0	0.	0.	0.

C.O. = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CK.

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.8	0.0	0.0	0.0	0.0	.3	16.0	0.0	0.	0.	0.
2	5.2	0.0	0.0	0.0	0.0	.3	13.0	0.0	0.	0.	0.
3	4.4	0.0	0.0	0.0	0.0	.2	12.0	0.0	0.	0.	0.
4	4.1	0.0	0.0	0.0	0.0	.2	10.0	0.0	0.	0.	0.
5	4.4	0.0	0.0	0.0	0.0	.3	11.0	0.0	0.	0.	0.
6	3.9	0.0	0.0	0.0	0.0	.2	12.0	0.0	0.	0.	0.
7	4.4	0.0	0.0	0.0	0.0	.3	22.0	0.0	0.	0.	0.
8	4.5	0.0	0.0	0.0	0.0	.2	12.0	0.0	0.	0.	0.
9	4.1	0.0	0.0	0.0	0.0	.2	9.0	0.0	0.	0.	0.
10	3.9	0.0	0.0	0.0	0.0	.3	17.0	0.0	0.	0.	0.
11	5.2	0.0	0.0	0.0	0.0	.2	9.0	0.0	0.	0.	0.
12	4.3	0.0	0.0	0.0	0.0	.2	11.0	0.0	0.	0.	0.
13	4.2	0.0	0.0	0.0	0.0	.3	18.0	0.0	0.	0.	0.
14	4.5	0.0	0.0	0.0	0.0	.3	15.0	0.0	0.	0.	0.
15	4.2	0.0	0.0	0.0	0.0	.2	11.0	0.0	0.	0.	0.
16	3.9	0.0	0.0	0.0	0.0	.2	11.0	0.0	0.	0.	0.
17	4.1	0.0	0.0	0.0	0.0	.2	6.0	0.0	0.	0.	0.
18	5.2	0.0	0.0	0.0	0.0	.3	9.0	0.0	0.	0.	0.
19	5.1	0.0	0.0	0.0	0.0	.2	11.0	0.0	0.	0.	0.
20	5.1	0.0	0.0	0.0	0.0	.2	17.0	0.0	0.	0.	0.
MEAN	4.5	0.0	0.0	0.0	0.0	.2	12.6	0.0	0.	0.	0.
STD DEV	.5	0.0	0.0	0.0	0.0	.1	3.8	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CK.

DATE 3 MAY 1985

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.5	0.0	0.0	0.0	14.0	.2	15.0	0.0	0.	0.	0.
2	4.4	0.0	0.0	0.0	12.0	.2	17.0	0.0	0.	0.	0.
3	5.2	0.0	0.0	0.0	13.0	.3	20.0	0.0	0.	0.	0.
4	4.9	0.0	0.0	0.0	12.0	.3	17.0	0.0	0.	0.	0.
5	4.8	0.0	0.0	0.0	12.0	.3	15.0	0.0	0.	0.	0.
6	4.9	0.0	13.0	7.0	0.0	.3	13.5	0.0	0.	0.	0.
7	4.2	0.0	0.0	0.0	8.0	.3	18.0	0.0	0.	0.	0.
8	3.5	0.0	18.0	7.0	0.0	.2	15.0	0.0	0.	0.	0.
9	3.9	0.0	0.0	0.0	6.0	.3	15.0	0.0	0.	0.	0.
10	4.9	0.0	24.0	14.0	0.0	.3	25.0	0.0	0.	0.	0.
11	4.4	0.0	0.0	0.0	20.0	.3	18.0	0.0	0.	0.	0.
12	5.1	0.0	0.0	0.0	7.0	.3	17.5	0.0	0.	0.	0.
13	4.9	0.0	0.0	0.0	6.0	.2	17.0	0.0	0.	0.	0.
14	4.2	0.0	0.0	0.0	11.0	.2	17.0	0.0	0.	0.	0.
15	4.4	0.0	0.0	0.0	10.0	.3	15.0	0.0	0.	0.	0.
16	3.9	0.0	0.0	0.0	5.0	.2	10.0	0.0	0.	0.	0.
17	3.9	0.0	0.0	0.0	5.0	.2	10.0	0.0	0.	0.	0.
18	4.3	0.0	8.0	4.0	0.0	.2	9.0	0.0	0.	0.	0.
19	4.8	0.0	0.0	0.0	3.0	.2	13.0	0.0	0.	0.	0.
20	5.5	0.0	0.0	0.0	2.0	.2	12.0	0.0	0.	0.	0.
MEAN	4.5	0.0	15.8	8.0	9.1	.3	15.5	0.0	0.	0.	0.
STD DEV	.5	0.0	6.8	4.2	4.7	.1	3.7	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CK.

DATE 24 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	4.6	0.0	0.0	0.0	0.0	.2	26.5	0.0	0.	0.	0.
2	4.3	0.0	0.0	0.0	0.0	.2	17.9	0.0	0.	0.	0.
3	5.3	0.0	0.0	0.0	0.0	.2	22.8	0.0	0.	0.	0.
4	5.1	0.0	0.0	0.0	0.0	.2	8.2	0.0	0.	0.	0.
5	5.2	0.0	0.0	0.0	0.0	.2	10.2	0.0	0.	0.	0.
6	5.2	0.0	0.0	0.0	0.0	.2	12.8	0.0	0.	0.	0.
7	5.2	0.0	0.0	0.0	0.0	.2	22.8	0.0	0.	0.	0.
8	4.9	0.0	0.0	0.0	0.0	.2	16.0	0.0	0.	0.	0.
9	4.7	0.0	0.0	0.0	0.0	.2	12.5	0.0	0.	0.	0.
10	4.7	0.0	0.0	0.0	0.0	.2	22.0	0.0	0.	0.	0.
11	4.9	0.0	0.0	0.0	0.0	.1	8.5	0.0	0.	0.	0.
12	5.4	0.0	0.0	0.0	0.0	.1	19.6	0.0	0.	0.	0.
13	5.6	0.0	0.0	0.0	0.0	.2	19.3	0.0	0.	0.	0.
14	5.0	0.0	0.0	0.0	0.0	.2	16.3	0.0	0.	0.	0.
15	5.5	0.0	0.0	0.0	0.0	.2	17.1	0.0	0.	0.	0.
16	5.1	0.0	0.0	0.0	0.0	.1	7.6	0.0	0.	0.	0.
17	5.0	0.0	0.0	0.0	0.0	.1	6.5	0.0	0.	0.	0.
18	5.8	0.0	0.0	0.0	0.0	.2	7.7	0.0	0.	0.	0.
19	5.2	0.0	0.0	0.0	0.0	.1	12.9	0.0	0.	0.	0.
20	5.3	0.0	0.0	0.0	0.0	.1	9.1	0.0	0.	0.	0.
MEAN	5.1	0.0	0.0	0.0	0.0	.2	14.8	0.0	0.	0.	0.
STD DEV	.3	0.0	0.0	0.0	0.0	.0	6.1	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CK.

DATE 6 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPR.	CLUMP LGTH. WIDTH	MAX. MAX. DIAM. LEAF LEAF WIDTH HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	5.9 0.0	18.0 15.0	0.0 .3 25.7	0.0 0.	0.	0.	135.	PLANT GRAZED
2	5.8 0.0	16.0 14.0	0.0 .3 27.0	0.0 0.	0.	0.	180.	NEW PLANT
3	5.6 0.0	0.0 0.0	0.0 .3 13.7	0.0 0.	0.	0.	0.	
4	5.8 0.0	0.0 0.0	0.0 .2 8.1	0.0 0.	0.	0.	0.	
5	5.6 0.0	0.0 0.0	0.0 .2 24.1	0.0 0.	0.	0.	0.	
6	5.8 0.0	0.0 0.0	0.0 .2 20.6	0.0 0.	0.	0.	0.	
7	5.9 0.0	0.0 0.0	0.0 .2 23.8	0.0 0.	0.	0.	0.	
8	5.5 0.0	0.0 0.0	0.0 .3 24.1	0.0 0.	0.	0.	0.	
9	5.6 0.0	19.0 19.0	0.0 .2 24.9	0.0 0.	0.	0.	105.	PLANT GRAZED
10	5.6 0.0	0.0 0.0	0.0 .3 33.6	0.0 0.	0.	0.	0.	
11	5.8 0.0	34.0 27.0	0.0 .3 31.1	0.0 0.	0.	0.	185.	PLANT GRAZED
12	5.9 0.0	0.0 0.0	0.0 .2 14.1	0.0 0.	0.	0.	0.	SIX LEAVES PRES.
13	5.8 0.0	0.0 0.0	0.0 .3 16.7	0.0 0.	0.	0.	0.	
14	5.9 0.0	0.0 0.0	0.0 .2 17.2	0.0 0.	0.	0.	0.	
15	5.5 0.0	0.0 0.0	0.0 .3 15.6	0.0 0.	0.	0.	0.	PLANT GRAZED
16	5.9 0.0	16.0 11.0	0.0 .2 19.8	0.0 0.	0.	0.	75.	PLANT GRAZED
17	5.3 0.0	0.0 0.0	0.0 .2 6.2	0.0 0.	0.	0.	0.	
18	5.8 0.0	18.0 9.0	0.0 .2 23.8	0.0 0.	0.	0.	35.	PLANT GRAZED
19	5.8 0.0	0.0 0.0	0.0 .2 13.5	0.0 0.	0.	0.	0.	
20	5.6 0.0	0.0 0.0	0.0 .2 8.4	0.0 0.	0.	0.	0.	
MEAN	5.7 0.0	20.2 15.8	0.0 .2 19.6	0.0 0.	0.	0.	128.	
STD DEV	.2 0.0	6.9 6.5	0.0 .1 7.6	0.0 0.	0.	0.	47.	

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 25 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	4.2	0.0	5.0	4.0	0.0	.2	6.0	0.0	0.	0.	7.	2B
2	4.4	0.0	2.0	2.0	0.0	.3	7.0	0.0	0.	0.	5.	2B
3	4.2	0.0	8.0	4.0	0.0	.2	5.0	0.0	0.	0.	15.	3B
4	3.8	0.0	0.0	0.0	0.0	.1	5.0	0.0	0.	0.	1.	2A
5	4.7	0.0	12.0	5.0	0.0	.3	9.0	0.0	0.	0.	12.	4C
6	4.5	0.0	4.0	2.0	0.0	.2	3.0	0.0	0.	0.	7.	2B
7	4.2	0.0	7.0	3.0	0.0	.1	4.0	0.0	0.	0.	20.	3B
8	4.6	0.0	11.0	4.0	0.0	.2	6.0	0.0	0.	0.	25.	3A
9	4.4	0.0	12.0	6.0	0.0	.2	5.0	0.0	0.	0.	14.	3B
10	4.7	0.0	0.0	0.0	0.0	.2	4.0	0.0	0.	0.	1.	2A
11	4.3	0.0	16.0	14.0	0.0	.3	8.0	0.0	0.	0.	25.	4B
12	4.1	0.0	13.0	9.0	0.0	.2	8.0	0.0	0.	0.	20.	4D
13	4.2	0.0	6.0	2.0	0.0	.2	7.0	0.0	0.	0.	8.	2B
14	4.2	0.0	40.0	12.0	0.0	.2	4.0	0.0	0.	0.	40.	5D
15	4.8	0.0	5.0	3.0	0.0	.2	9.0	0.0	0.	0.	5.	2B
16	4.6	0.0	19.0	8.0	0.0	.2	6.0	0.0	0.	0.	17.	5D
17	4.3	0.0	16.0	8.0	0.0	.3	9.0	0.0	0.	0.	20.	4B
18	4.3	0.0	2.0	2.0	0.0	.2	5.0	0.0	0.	0.	4.	2B
19	4.5	0.0	3.0	2.0	0.0	.2	6.0	0.0	0.	0.	6.	2B
20	4.3	0.0	11.0	7.0	0.0	.2	7.0	0.0	0.	0.	25.	4B
MEAN	4.4	0.0	10.7	5.4	0.0	.2	6.2	0.0	0.	0.	14.	
STD DEV	.2	0.0	8.9	3.6	0.0	.1	1.8	0.0	0.	0.	10.	

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.5	0.0	0.0	0.0	2.0	.2	6.1	0.0	0.	0.	3.
2	4.3	0.0	0.0	0.0	3.0	.2	5.8	0.0	0.	0.	5.
3	4.7	0.0	0.0	0.0	1.0	.2	9.6	0.0	0.	0.	3.
4	3.8	0.0	0.0	0.0	1.0	.1	5.1	0.0	0.	0.	1.
5	4.5	0.0	11.0	6.0	0.0	.2	6.3	0.0	0.	0.	26.
6	4.2	0.0	0.0	0.0	1.0	.3	7.6	0.0	0.	0.	1.
7	4.4	0.0	5.0	3.0	0.0	.3	12.2	0.0	0.	0.	5.
8	4.5	0.0	0.0	0.0	2.0	.3	7.8	0.0	0.	0.	4.
9	4.2	0.0	3.0	2.0	0.0	.3	12.4	0.0	0.	0.	3.
10	4.2	0.0	5.0	2.0	0.0	.2	11.3	0.0	0.	0.	6.
11	4.9	0.0	0.0	0.0	14.0	.2	10.2	0.0	0.	0.	54.
12	5.3	0.0	0.0	0.0	13.0	.3	6.4	0.0	0.	0.	26.
13	5.0	0.0	8.0	6.0	0.0	.3	5.1	0.0	0.	0.	8.
14	4.8	0.0	0.0	0.0	9.0	.2	6.1	0.0	0.	0.	9.
15	4.7	0.0	0.0	0.0	2.0	.2	4.3	0.0	0.	0.	4.
16	4.6	0.0	0.0	0.0	3.0	.2	4.9	0.0	0.	0.	5.
17	5.7	0.0	0.0	0.0	3.0	.2	3.2	0.0	0.	0.	4.
18	4.9	0.0	0.0	0.0	2.0	.2	4.0	0.0	0.	0.	4.
19	5.0	0.0	0.0	0.0	4.0	.2	11.5	0.0	0.	0.	5.
20	5.2	0.0	12.0	8.0	0.0	.2	8.7	0.0	0.	0.	36.

MEAN 4.7 0.0 7.5 4.5 4.3 .2 7.4 0.0 0. 0. 11.

STD DEV .4 0.0 3.5 2.5 4.4 .1 2.9 0.0 0. 0. 14.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 25 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.1	0.0	0.0	0.0	0.0	.2	8.5	0.0	0.	0.	0.
2	5.4	0.0	0.0	0.0	0.0	.2	12.2	0.0	0.	0.	0.
3	4.9	0.0	0.0	0.0	0.0	.2	12.4	0.0	0.	0.	0.
4	4.9	0.0	0.0	0.0	0.0	.1	7.9	0.0	0.	0.	0.
5	5.4	0.0	0.0	0.0	0.0	.3	15.8	0.0	0.	0.	0.
6	4.9	0.0	0.0	0.0	0.0	.2	11.6	0.0	0.	0.	0.
7	5.0	0.0	0.0	0.0	0.0	.2	16.6	0.0	0.	0.	0.
8	5.4	0.0	0.0	0.0	0.0	.1	10.3	0.0	0.	0.	0.
9	5.1	0.0	0.0	0.0	0.0	.2	14.2	0.0	0.	0.	0.
10	4.9	0.0	0.0	0.0	0.0	.2	10.1	0.0	0.	0.	0.
11	5.3	0.0	0.0	0.0	0.0	.2	19.3	0.0	0.	0.	0.
12	5.2	0.0	0.0	0.0	0.0	.2	26.1	0.0	0.	0.	0.
13	5.2	0.0	0.0	0.0	0.0	.2	14.4	0.0	0.	0.	0.
14	5.4	0.0	0.0	0.0	0.0	.2	11.1	0.0	0.	0.	0.
15	5.1	0.0	0.0	0.0	0.0	.1	7.8	0.0	0.	0.	0.
16	4.9	0.0	0.0	0.0	0.0	.2	10.2	0.0	0.	0.	0.
17	5.3	0.0	0.0	0.0	0.0	.3	12.9	0.0	0.	0.	0.
18	5.1	0.0	0.0	0.0	0.0	.2	8.1	0.0	0.	0.	0.
19	5.1	0.0	0.0	0.0	0.0	.2	15.1	0.0	0.	0.	0.
20	5.1	0.0	0.0	0.0	0.0	.2	16.5	0.0	0.	0.	0.
MEAN	5.1	0.0	0.0	0.0	0.0	.2	13.1	0.0	0.	0.	0.
STD DEV	.2	0.0	0.0	0.0	0.0	.1	4.5	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DWL DRAW

DATE 2 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.3	0.0	0.0	0.0	0.0	.2	7.5	0.0	0.	0.	0.
2	5.6	0.0	0.0	0.0	0.0	.3	12.5	0.0	0.	0.	0.
3	5.2	0.0	0.0	0.0	0.0	.2	11.0	0.0	0.	0.	0.
4	5.9	0.0	0.0	0.0	0.0	.2	14.0	0.0	0.	0.	0.
5	5.3	9.0	0.0	0.0	0.0	.3	17.5	0.0	0.	0.	0.
6	5.2	0.0	0.0	0.0	0.0	.3	14.0	0.0	0.	0.	0.
7	4.6	0.0	0.0	0.0	0.0	.3	16.0	0.0	0.	0.	0.
8	5.1	0.0	0.0	0.0	0.0	.4	19.0	0.0	0.	0.	0.
9	5.5	0.0	0.0	0.0	0.0	.2	15.0	0.0	0.	0.	0.
10	4.8	0.0	0.0	0.0	0.0	.3	15.0	0.0	0.	0.	0.
11	5.6	9.0	0.0	0.0	0.0	.2	20.0	0.0	0.	0.	0.
12	5.5	0.0	0.0	0.0	0.0	.2	14.0	0.0	0.	0.	0.
13	5.9	0.0	0.0	0.0	0.0	.3	16.0	0.0	0.	0.	0.
14	5.7	0.0	0.0	0.0	0.0	.4	11.5	0.0	0.	0.	0.
15	5.9	9.0	0.0	0.0	0.0	.3	17.5	0.0	0.	0.	0.
16	5.3	0.0	0.0	0.0	0.0	.3	19.0	0.0	0.	0.	0.
17	5.5	0.0	0.0	0.0	0.0	.3	12.5	0.0	0.	0.	0.
18	5.6	0.0	0.0	0.0	0.0	.2	10.0	0.0	0.	0.	0.
19	5.3	0.0	0.0	0.0	0.0	.2	16.0	0.0	0.	0.	0.
20	5.2	0.0	0.0	0.0	0.0	.3	16.0	0.0	0.	0.	0.
MEAN	5.4	9.0	0.0	0.0	0.0	.3	14.7	0.0	0.	0.	0.
STD DEV	.3	0.0	0.0	0.0	0.0	.1	3.2	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH. WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	0.0	0.0	0.0	1.0	.3	7.0	0.0	0.	3.
2	5.2	0.0	1.0	.5	0.0	.3	12.0	0.0	0.	5.
3	4.7	0.0	2.0	.5	0.0	.2	11.0	0.0	0.	3.
4	5.5	0.0	0.0	0.0	.5	.2	14.0	0.0	0.	2.
5	5.5	10.0	6.0	3.0	0.0	.3	22.0	10.0	7.	19.
6	4.7	0.0	0.0	0.0	.2	.2	13.5	0.0	0.	1.
7	4.9	0.0	3.0	1.0	0.0	.2	16.5	0.0	0.	3.
8	4.9	0.0	1.0	.5	0.0	.2	10.5	0.0	0.	4.
9	4.9	0.0	0.0	0.0	.2	.3	14.0	0.0	0.	1.
10	4.2	0.0	1.5	1.0	0.0	.2	16.0	0.0	0.	5.
11	4.9	10.0	16.0	9.0	0.0	.3	22.0	6.0	4.	48.
12	5.1	0.0	0.0	0.0	17.0	.2	12.5	0.0	0.	33.
13	5.2	0.0	6.0	3.0	0.0	.3	14.5	0.0	0.	10.
14	5.4	0.0	4.0	2.0	0.0	.3	11.0	0.0	0.	5.
15	5.6	0.0	0.0	0.0	1.0	.2	9.0	0.0	0.	4.
16	5.3	0.0	15.0	7.0	0.0	.3	11.0	0.0	0.	15.
17	5.2	0.0	0.0	0.0	12.0	.3	11.0	0.0	0.	35.
18	5.1	0.0	0.0	0.0	1.0	.2	9.5	0.0	0.	4.
19	4.9	0.0	0.0	0.0	2.0	.2	17.0	0.0	0.	5.
20	5.1	0.0	14.0	8.0	0.0	.3	9.5	0.0	0.	43.
MEAN	5.1	10.0	6.3	3.2	3.9	.3	13.2	8.0	6.	12.
STD DEV	.4	0.0	5.9	3.2	6.2	.1	4.0	2.8	2.	15.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.3	0.0	0.0	0.0	0.0	.3	7.2	0.0	0.	0.	0.
2	5.2	0.0	0.0	0.0	0.0	.3	13.0	0.0	0.	0.	0.
3	4.8	0.0	0.0	0.0	0.0	.2	10.0	0.0	0.	0.	0.
4	5.7	0.0	0.0	0.0	0.0	.3	10.6	0.0	0.	0.	0.
5	5.8	12.0	0.0	0.0	0.0	.3	23.9	29.0	7.	0.	0.
6	4.9	0.0	0.0	0.0	0.0	.2	8.6	0.0	0.	0.	0.
7	4.7	0.0	0.0	0.0	0.0	.3	16.8	0.0	0.	0.	0.
8	4.8	0.0	0.0	0.0	0.0	.3	15.5	0.0	0.	0.	0.
9	4.8	0.0	0.0	0.0	0.0	.2	14.5	0.0	0.	0.	0.
10	4.9	0.0	0.0	0.0	0.0	.2	17.0	0.0	0.	0.	0.
11	5.8	0.0	0.0	0.0	0.0	.3	16.8	0.0	0.	0.	0.
12	5.9	0.0	0.0	0.0	0.0	.3	8.7	0.0	0.	0.	0.
13	5.9	0.0	0.0	0.0	0.0	.3	14.1	0.0	0.	0.	0.
14	5.8	0.0	0.0	0.0	0.0	.3	10.0	0.0	0.	0.	0.
15	5.7	0.0	0.0	0.0	0.0	.3	9.2	0.0	0.	0.	0.
16	5.5	0.0	0.0	0.0	0.0	.3	10.1	0.0	0.	0.	0.
17	4.9	0.0	0.0	0.0	0.0	.3	8.7	0.0	0.	0.	0.
18	5.2	0.0	0.0	0.0	0.0	.3	10.3	0.0	0.	0.	0.
19	4.9	0.0	0.0	0.0	0.0	.2	15.2	0.0	0.	0.	0.
20	5.2	0.0	0.0	0.0	0.0	.3	10.1	0.0	0.	0.	0.
MEAN	5.3	12.0	0.0	0.0	0.0	.3	12.5	29.0	7.	0.	0.
STD DEV	.5	0.0	0.0	0.0	0.0	.0	4.1	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 13 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.6	0.0	0.0	0.0	0.0	.2	7.9	0.0	0.	0.	0.
2	5.7	0.0	0.0	0.0	0.0	.2	12.4	0.0	0.	0.	0.
3	5.4	0.0	0.0	0.0	0.0	.2	10.1	0.0	0.	0.	0.
4	5.7	0.0	0.0	0.0	0.0	.2	14.8	0.0	0.	0.	0.
5	5.7	13.0	0.0	0.0	0.0	.3	17.5	33.2	8.	0.	0.
6	5.6	0.0	0.0	0.0	0.0	.2	14.0	0.0	0.	0.	0.
7	5.3	0.0	0.0	0.0	0.0	.2	15.5	0.0	0.	0.	0.
8	5.4	0.0	0.0	0.0	0.0	.2	11.0	0.0	0.	0.	0.
9	5.8	0.0	0.0	0.0	0.1	.2	14.3	0.0	0.	0.	0.
10	5.7	0.0	0.0	0.0	0.0	.2	15.7	0.0	0.	0.	0.
11	5.4	14.0	0.0	0.0	0.0	.2	18.9	20.1	9.	0.	0.
12	5.5	0.0	0.0	0.0	0.0	.2	14.6	0.0	0.	0.	0.
13	5.4	0.0	0.0	0.0	0.0	.2	14.7	0.0	0.	0.	0.
14	5.5	0.0	0.0	0.0	0.0	.3	10.7	0.0	0.	0.	0.
15	5.2	0.0	0.0	0.0	0.0	.2	9.4	0.0	0.	0.	0.
16	5.6	0.0	0.0	0.0	0.0	.2	10.3	0.0	0.	0.	0.
17	5.7	0.0	0.0	0.0	0.0	.2	12.0	0.0	0.	0.	0.
18	5.3	0.0	0.0	0.0	0.0	.2	10.2	0.0	0.	0.	0.
19	5.6	0.0	0.0	0.0	0.0	.2	15.6	0.0	0.	0.	0.
20	5.3	0.0	0.0	0.0	0.0	.2	9.6	0.0	0.	0.	0.
MEAN	5.5	13.5	0.0	0.0	0.0	.2	13.0	26.7	9.	0.	0.
STD DEV	.2	.7	0.0	0.0	0.0	.0	3.0	9.3	1.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 26 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE SCORE VEG. REPP.	CLUMP LGTH. WIDTH	MAX. DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.3 0.0	0.0 0.0	0.0	.3	10.4	0.0	0.	0.	0.
2	6.2 0.0	0.0 0.0	0.0	.3	13.6	0.0	0.	0.	0.
3	6.2 15.0	0.0 0.0	0.0	.3	16.5	19.2	4.	0.	0.
4	6.5 0.0	0.0 0.0	0.0	.3	10.6	0.0	0.	0.	0.
5	6.3 16.0	0.0 0.0	0.0	.3	23.8	31.0	8.	0.	0.
6	6.4 0.0	0.0 0.0	0.0	.2	11.5	0.0	0.	0.	0.
7	6.2 0.0	0.0 0.0	0.0	.3	14.0	0.0	0.	0.	0.
8	6.4 15.0	0.0 0.0	0.0	.3	27.0	34.2	7.	0.	0.
9	6.4 0.0	0.0 0.0	0.0	.3	18.2	0.0	0.	0.	0.
10	6.6 15.0	0.0 0.0	0.0	.3	23.2	27.0	5.	0.	0.
11	6.6 0.0	0.0 0.0	0.0	.3	11.2	0.0	0.	0.	0.
12	6.5 0.0	0.0 0.0	0.0	.3	12.5	0.0	0.	0.	0.
13	6.5 15.0	0.0 0.0	0.0	.3	19.5	30.1	6.	0.	0.
14	6.5 0.0	0.0 0.0	0.0	.3	10.2	0.0	0.	0.	0.
15	6.3 0.0	0.0 0.0	0.0	.3	13.1	0.0	0.	0.	0.
16	6.4 16.0	0.0 0.0	0.0	.2	17.4	21.0	5.	0.	0.
17	6.4 0.0	0.0 0.0	0.0	.3	9.1	0.0	0.	0.	0.
18	6.5 15.0	0.0 0.0	0.0	.3	15.2	15.5	4.	0.	0.
19	6.5 16.0	0.0 0.0	0.0	.3	23.5	28.1	9.	0.	0.
20	6.4 0.0	0.0 0.0	0.0	.3	19.2	0.0	0.	0.	0.
MEAN	6.4 15.4	0.0 0.0	0.0	.3	16.0	25.8	6.	0.	0.
STD DEV	.1 .5	0.0 0.0	0.0	.0	5.3	6.5	2.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 26 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.3	0.0	0.0	0.0	0.0	.2	8.5	0.0	0.	0.	0.
2	6.7	0.0	0.0	0.0	0.0	.2	13.0	0.0	0.	0.	0.
3	6.3	0.0	0.0	0.0	0.0	.2	12.3	0.0	0.	0.	0.
4	6.6	0.0	0.0	0.0	0.0	.2	15.3	0.0	0.	0.	0.
5	6.4	16.0	0.0	0.0	0.0	.3	16.5	33.2	0.	0.	0.
6	6.5	0.0	0.0	0.0	0.0	.2	11.1	0.0	0.	0.	0.
7	6.7	0.0	0.0	0.0	0.0	.2	18.2	0.0	0.	0.	0.
8	6.5	0.0	0.0	0.0	0.0	.2	11.9	0.0	0.	0.	0.
9	6.5	0.0	0.0	0.0	0.0	.2	12.1	0.0	0.	0.	0.
10	6.9	0.0	0.0	0.0	0.0	.1	16.2	0.0	0.	0.	0.
11	6.5	16.0	0.0	0.0	0.0	.2	17.6	20.4	0.	0.	0.
12	6.7	0.0	0.0	0.0	0.0	.2	16.5	0.0	0.	0.	0.
13	6.6	0.0	0.0	0.0	0.0	.2	12.1	0.0	0.	0.	0.
14	6.9	0.0	0.0	0.0	0.0	.2	7.6	0.0	0.	0.	0.
15	6.7	0.0	0.0	0.0	0.0	.1	9.5	0.0	0.	0.	0.
16	6.1	0.0	0.0	0.0	0.0	.1	10.7	0.0	0.	0.	0.
17	6.5	0.0	0.0	0.0	0.0	.2	11.7	0.0	0.	0.	0.
18	6.7	0.0	0.0	0.0	0.0	.2	10.2	0.0	0.	0.	0.
19	6.4	0.0	0.0	0.0	0.0	.2	15.1	0.0	0.	0.	0.
20	6.6	0.0	0.0	0.0	0.0	.1	15.4	0.0	0.	0.	0.
MEAN	6.6	16.0	0.0	0.0	0.0	.2	13.1	26.8	0.	0.	0.
STD DEV	.2	0.0	0.0	0.0	0.0	.0	3.1	9.1	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 5 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.8	0.0	0.0	0.0	0.0	.3	6.6	0.0	0.	0.	0.
2	6.9	0.0	0.0	0.0	0.0	.3	13.0	0.0	0.	0.	0.
3	6.8	0.0	0.0	0.0	0.0	.3	9.5	0.0	0.	0.	0.
4	6.8	0.0	0.0	0.0	0.0	.3	9.6	0.0	0.	0.	0.
5	6.8	16.0	0.0	0.0	0.0	.3	13.7	28.7	0.	0.	0.
6	6.9	0.0	0.0	0.0	0.0	.2	9.0	0.0	0.	0.	0.
7	6.9	0.0	0.0	0.0	0.0	.3	14.2	0.0	0.	0.	0.
8	6.9	0.0	0.0	0.0	0.0	.3	13.9	0.0	0.	0.	0.
9	6.8	0.0	0.0	0.0	0.0	.3	6.8	0.0	0.	0.	0.
10	8.0	0.0	0.0	0.0	0.0	.3	7.2	0.0	0.	0.	0.
11	6.7	0.0	0.0	0.0	0.0	.3	18.2	0.0	0.	0.	0.
12	6.8	0.0	0.0	0.0	0.0	.3	8.6	0.0	0.	0.	0.
13	6.8	0.0	0.0	0.0	0.0	.3	10.0	0.0	0.	0.	0.
14	6.7	0.0	0.0	0.0	0.0	.3	10.6	0.0	0.	0.	0.
15	6.8	0.0	0.0	0.0	0.0	.2	6.5	0.0	0.	0.	0.
16	6.8	0.0	0.0	0.0	0.0	.3	11.9	0.0	0.	0.	0.
17	6.9	0.0	0.0	0.0	0.0	.2	7.9	0.0	0.	0.	0.
18	6.9	0.0	0.0	0.0	0.0	.3	10.2	0.0	0.	0.	0.
19	6.8	0.0	0.0	0.0	0.0	.3	13.5	0.0	0.	0.	0.
20	6.9	0.0	0.0	0.0	0.0	.2	8.2	0.0	0.	0.	0.
MEAN	6.9	16.0	0.0	0.0	0.0	.3	10.5	28.7	0.	0.	0.
STD DEV	.3	0.0	0.0	0.0	0.0	.0	3.1	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH. WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.8	0.0	11.2	6.0	0.0	.2	12.2	0.0	0.	11.
2	6.7	0.0	3.6	2.9	0.0	.2	13.8	0.0	0.	3.
3	6.5	0.0	2.1	2.4	0.0	.2	13.6	0.0	0.	2.
4	6.8	0.0	6.1	3.7	0.0	.2	15.3	0.0	0.	4.
5	6.9	16.0	10.8	5.3	0.0	.3	23.6	32.7	8.	10.
6	6.9	0.0	1.1	1.1	0.0	.2	10.2	0.0	0.	1.
7	6.9	0.0	4.1	2.2	0.0	.2	16.1	0.0	0.	3.
8	6.8	0.0	8.6	2.3	0.0	.2	14.7	0.0	0.	3.
9	6.9	0.0	3.4	1.3	0.0	.2	8.9	0.0	0.	2.
10	6.8	0.0	11.1	4.6	0.0	.2	17.1	0.0	0.	6.
11	6.9	16.0	20.2	17.3	0.0	.2	22.1	20.1	6.	48.
12	6.8	0.0	19.4	13.0	0.0	.2	13.4	0.0	0.	28.
13	6.8	0.0	12.8	6.0	0.0	.2	16.7	0.0	0.	7.
14	6.9	0.0	15.2	7.6	0.0	.2	12.9	0.0	0.	9.
15	6.9	0.0	5.9	3.4	0.0	.2	9.7	0.0	0.	4.
16	6.9	0.0	12.1	10.1	0.0	.2	9.5	0.0	0.	10.
17	6.9	0.0	24.1	12.8	0.0	.2	11.0	0.0	0.	31.
18	6.8	0.0	4.8	3.9	0.0	.2	10.9	0.0	0.	5.
19	6.8	0.0	6.2	5.0	0.0	.2	15.3	0.0	0.	4.
20	6.9	0.0	13.2	16.8	0.0	.2	14.0	0.0	0.	29.
MEAN	6.8	16.0	9.8	6.4	0.0	.2	14.1	26.4	7.	11.
STD DEV	.1	0.0	6.4	5.0	0.0	.0	3.9	8.9	1.	13.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 25 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM	
1	2.5	0.0	14.0	8.0	0.0	.1	6.4	0.0	0.	0.	8.	
2	3.4	0.0	70.0	30.0	0.0	.2	7.6	0.0	0.	0.	5.	
3	3.5	0.0	93.0	62.0	0.0	.2	2.7	0.0	0.	0.	4.	CENTER DEAD, 4D
4	3.3	0.0	76.0	28.0	0.0	.2	5.7	0.0	0.	0.	5.	4C
5	3.2	0.0	55.0	45.0	0.0	.1	5.0	0.0	0.	0.	3.	4C
6	3.1	0.0	10.0	5.0	0.0	.2	2.3	0.0	0.	0.	2.	3B
7	3.2	0.0	20.0	8.0	0.0	.2	4.1	0.0	0.	0.	3.	3B
8	2.7	0.0	14.0	14.0	0.0	.1	3.5	0.0	0.	0.	2.	5D
9	3.5	0.0	45.0	19.0	0.0	.1	3.5	0.0	0.	0.	3.	5D
10	3.6	0.0	20.0	7.0	0.0	.2	3.5	0.0	0.	0.	5.	3A
11	3.4	0.0	9.0	4.0	0.0	.2	6.0	0.0	0.	0.	5.	3B
12	3.5	0.0	33.0	4.0	0.0	.2	3.5	0.0	0.	0.	3.	4B
13	3.9	0.0	67.0	45.0	0.0	.2	4.1	0.0	0.	0.	4.	4C
14	3.9	0.0	0.0	0.0	79.0	.2	3.6	0.0	0.	0.	5.	5D
15	3.6	0.0	25.0	14.0	0.0	.2	3.5	0.0	0.	0.	3.	4C
16	3.2	0.0	55.0	26.0	0.0	.1	3.2	0.0	0.	0.	2.	3A
17	3.3	0.0	37.0	34.0	0.0	.1	4.1	0.0	0.	0.	6.	4C
18	3.4	0.0	30.0	27.0	0.0	.1	3.8	0.0	0.	0.	3.	4C
19	3.6	0.0	42.0	20.0	0.0	.2	3.5	0.0	0.	0.	5.	4A
20	3.9	0.0	24.0	14.0	0.0	.2	5.9	0.0	0.	0.	3.	4C
MEAN	3.4	0.0	38.9	21.8	79.0	.2	4.3	0.0	0.	0.	4.	
STD DEV	.4	0.0	24.5	16.2	0.0	.0	1.4	0.0	0.	0.	2.	

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 2 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH. WIDTH	MAX. DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.5	0.0	39.0 36.0	0.0	.2	6.3	0.0	0.	0.	0.
2	4.2	0.0	88.0 29.0	0.0	.3	8.3	0.0	0.	0.	0.
3	4.1	0.0	91.0 70.0	0.0	.2	9.6	0.0	0.	0.	0.
4	4.5	0.0	74.0 27.0	0.0	.2	9.1	0.0	0.	0.	0.
5	3.9	0.0	56.0 44.0	0.0	.2	5.8	0.0	0.	0.	0.
6	4.5	0.0	0.0 0.0	0.0	.2	5.1	0.0	0.	0.	0.
7	4.8	0.0	20.0 11.0	0.0	.3	7.8	0.0	0.	0.	0.
8	4.7	0.0	17.0 15.0	0.0	.2	9.1	0.0	0.	0.	0.
9	4.2	0.0	60.0 22.0	0.0	.2	5.9	0.0	0.	0.	0.
10	4.5	0.0	12.0 6.0	0.0	.2	6.3	0.0	0.	0.	0.
11	4.5	0.0	10.0 5.0	0.0	.2	7.8	0.0	0.	0.	0.
12	4.6	0.0	35.0 17.0	0.0	.2	7.8	0.0	0.	0.	0.
13	4.3	0.0	52.0 47.0	0.0	.2	5.4	0.0	0.	0.	0.
14	4.5	0.0	76.0 72.0	0.0	.2	7.2	0.0	0.	0.	0.
15	4.5	0.0	25.0 13.0	0.0	.2	6.5	0.0	0.	0.	0.
16	4.6	0.0	0.0 0.0	0.0	.2	6.6	0.0	0.	0.	0.
17	4.5	0.0	40.0 32.0	0.0	.2	5.9	0.0	0.	0.	0.
18	4.1	0.0	20.0 13.0	0.0	.2	4.5	0.0	0.	0.	0.
19	4.6	0.0	40.0 13.0	0.0	.2	5.6	0.0	0.	0.	0.
20	4.6	0.0	23.0 15.0	0.0	.2	7.5	0.0	0.	0.	0.
MEAN	4.4	0.0	43.8 27.1	0.0	.2	6.9	0.0	0.	0.	0.
STD DEV	.2	0.0	26.3 20.1	0.0	.0	1.4	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 26 MAY 1982

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	CLUMP LGTH. WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGT	MAX. SPK HGT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	4.4	0.0	0.0	0.0	0.0	.2	25.4	0.0	0.	0.
2	4.3	0.0	0.0	0.0	0.0	.3	24.9	0.0	0.	0.
3	4.5	0.0	0.0	0.0	0.0	.3	25.1	0.0	0.	0.
4	4.4	0.0	0.0	0.0	0.0	.3	27.8	0.0	0.	0.
5	4.2	0.0	0.0	0.0	0.0	.3	30.0	0.0	0.	0.
6	4.3	0.0	0.0	0.0	0.0	.2	17.1	0.0	0.	0.
7	4.5	0.0	0.0	0.0	0.0	.2	22.0	0.0	0.	0.
8	4.5	0.0	0.0	0.0	0.0	.2	21.5	0.0	0.	0.
9	4.5	0.0	0.0	0.0	0.0	.2	19.8	0.0	0.	0.
10	4.4	0.0	0.0	0.0	0.0	.2	14.4	0.0	0.	0.
11	4.5	0.0	0.0	0.0	0.0	.2	14.6	0.0	0.	0.
12	4.6	0.0	0.0	0.0	0.0	.2	14.5	0.0	0.	0.
13	4.4	0.0	0.0	0.0	0.0	.3	24.8	0.0	0.	0.
14	4.5	0.0	0.0	0.0	0.0	.2	23.2	0.0	0.	0.
15	4.9	0.0	0.0	0.0	0.0	.2	25.6	0.0	0.	0.
16	4.7	0.0	0.0	0.0	0.0	.3	20.8	0.0	0.	0.
17	4.8	0.0	0.0	0.0	0.0	.2	22.3	0.0	0.	0.
18	5.1	0.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.
19	5.2	0.0	0.0	0.0	0.0	.3	29.1	0.0	0.	0.
20	5.4	0.0	0.0	0.0	0.0	.3	32.9	0.0	0.	0.
MEAN	4.6	0.0	0.0	0.0	0.0	.2	22.7	0.0	0.	0.
STD DEV	.3	0.0	0.0	0.0	0.0	.1	5.2	0.0	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 2 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM

1	5.4	0.0	0.0	0.0	0.0	.3	25.4	0.0	0.	0.	0.
2	5.3	0.0	0.0	0.0	0.0	.3	23.9	0.0	0.	0.	0.
3	5.5	0.0	0.0	0.0	0.0	.3	26.0	0.0	0.	0.	0.
4	5.4	0.0	0.0	0.0	0.0	.3	25.6	0.0	0.	0.	0.
5	4.9	0.0	0.0	0.0	0.0	.3	31.7	0.0	0.	0.	0.
6	5.1	0.0	0.0	0.0	0.0	.3	18.9	0.0	0.	0.	0.
7	4.9	0.0	0.0	0.0	0.0	.3	25.9	0.0	0.	0.	0.
8	5.1	0.0	0.0	0.0	0.0	.3	28.3	0.0	0.	0.	0.
9	5.3	0.0	0.0	0.0	0.0	.3	26.2	0.0	0.	0.	0.
10	5.2	0.0	0.0	0.0	0.0	.3	14.5	0.0	0.	0.	0.
11	5.0	0.0	0.0	0.0	0.0	.2	10.5	0.0	0.	0.	0.
12	5.2	0.0	0.0	0.0	0.0	.3	26.6	0.0	0.	0.	0.
13	5.2	0.0	0.0	0.0	0.0	.3	29.5	0.0	0.	0.	0.
14	5.4	0.0	0.0	0.0	0.0	.3	26.4	0.0	0.	0.	0.
15	5.2	0.0	0.0	0.0	0.0	.3	27.5	0.0	0.	0.	0.
16	5.3	0.0	0.0	0.0	0.0	.3	21.5	0.0	0.	0.	0.
17	5.4	0.0	0.0	0.0	0.0	.3	32.1	0.0	0.	0.	0.
18	5.3	0.0	0.0	0.0	0.0	.2	20.4	0.0	0.	0.	0.
19	5.4	0.0	0.0	0.0	0.0	.3	32.6	0.0	0.	0.	0.
20	5.4	0.0	0.0	0.0	0.0	.4	31.8	0.0	0.	0.	0.
MEAN	5.2	0.0	0.0	0.0	0.0	.3	25.3	0.0	0.	0.	0.
STD DEV	.2	0.0	0.0	0.0	0.0	.0	5.8	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 16 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	5.8	10.0	19.0	6.0	0.0	.3	26.7	25.5	5.	3.	50.
2	5.8	10.0	71.0	30.0	0.0	.3	40.1	32.5	6.	15.	250.
3	5.9	8.0	98.0	69.0	0.0	.3	39.1	0.0	0.	0.	260.
4	5.8	10.0	77.0	28.0	0.0	.3	43.5	33.0	5.	13.	210.
5	5.9	10.0	53.0	46.0	0.0	.3	40.5	30.1	0.	0.	1040.
6	5.8	9.0	8.0	4.0	0.0	.3	20.5	10.5	0.	3.	18.
7	5.7	10.0	19.0	13.0	0.0	.3	26.0	30.5	7.	1.	120.
8	5.8	0.0	18.0	8.0	0.0	.3	33.3	0.0	0.	0.	64.
9	5.9	10.0	97.0	62.0	0.0	.3	25.6	29.5	5.	300.	880.
10	5.8	9.0	6.0	3.0	0.0	.3	16.2	0.0	0.	1.	11.
11	5.9	0.0	10.0	3.0	0.0	.2	18.1	0.0	0.	0.	28.
12	5.9	0.0	30.0	17.0	0.0	.3	31.3	0.0	0.	0.	120.
13	5.8	9.0	74.0	49.0	0.0	.3	38.6	27.5	0.	280.	560.
14	5.9	10.0	79.0	67.0	0.0	.3	31.4	35.0	3.	390.	960.
15	5.9	10.0	16.0	15.0	0.0	.3	32.7	28.8	5.	3.	35.
16	5.7	0.0	27.0	16.0	0.0	.2	27.8	0.0	0.	0.	40.
17	5.9	10.0	39.0	28.0	0.0	.2	27.9	26.0	6.	284.	480.
18	5.9	0.0	23.0	11.0	0.0	.2	25.3	0.0	0.	0.	104.
19	5.9	10.0	44.0	20.0	0.0	.2	30.2	33.1	3.	12.	55.
20	5.9	10.0	28.0	16.0	0.0	.2	28.5	42.0	7.	107.	320.
MEAN	5.8	9.7	41.3	25.6	0.0	.3	30.2	29.5	5.	109.	280.
STD DEV	.1	.6	29.4	21.6	0.0	.0	7.5	7.2	1.	147.	331.

0.0 = NOT RECORDED

AGROPYRON SPICATJM

STUDY AREA RED WASH

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	5.9	11.0	0.0	0.0	0.0	.3	26.5	49.5	0.	0.	0.
2	5.9	11.0	0.0	0.0	0.0	.3	31.4	55.0	0.	0.	0.
3	5.8	0.0	0.0	0.0	0.0	.3	30.1	0.0	0.	0.	0.
4	5.9	11.0	0.0	0.0	0.0	.3	36.9	57.5	0.	0.	0.
5	5.9	12.0	0.0	0.0	0.0	.3	31.9	54.2	0.	0.	0.
6	5.8	10.0	0.0	0.0	0.0	.3	23.5	21.8	0.	0.	0.
7	5.9	11.0	0.0	0.0	0.0	.3	24.5	27.5	0.	0.	0.
8	5.9	10.0	0.0	0.0	0.0	.3	27.8	35.5	0.	0.	0.
9	5.9	11.0	0.0	0.0	0.0	.3	28.0	54.3	0.	0.	0.
10	5.8	11.0	0.0	0.0	0.0	.3	15.5	20.1	0.	0.	0.
11	5.8	0.0	0.0	0.0	0.0	.3	19.8	0.0	0.	0.	0.
12	5.9	0.0	0.0	0.0	0.0	.3	31.5	0.0	0.	0.	0.
13	5.9	11.0	0.0	0.0	0.0	.4	27.4	58.0	0.	0.	0.
14	5.9	11.0	0.0	0.0	0.0	.3	32.6	51.5	0.	0.	0.
15	5.9	12.0	0.0	0.0	0.0	.3	19.8	43.6	0.	0.	0.
16	5.9	12.0	0.0	0.0	0.0	.4	22.9	36.5	0.	0.	0.
17	5.9	12.0	0.0	0.0	0.0	.4	28.5	43.2	0.	0.	0.
18	5.9	0.0	0.0	0.0	0.0	.3	24.2	0.0	0.	0.	0.
19	5.9	11.0	0.0	0.0	0.0	.3	37.5	49.0	0.	0.	0.
20	5.9	12.0	0.0	0.0	0.0	.4	36.5	61.2	0.	0.	0.
MEAN	5.9	11.2	0.0	0.0	0.0	.3	27.8	45.0	0.	0.	0.
STD DEV	.3	.7	0.0	0.0	0.0	.0	5.9	13.1	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	14.0	0.0	0.0	0.0	.3	27.2	54.4	0.	0.	0.
2	5.9	14.0	0.0	0.0	0.0	.4	27.6	56.2	0.	0.	0.
3	5.9	0.0	0.0	0.0	0.0	.3	25.6	0.0	0.	0.	0.
4	5.9	14.0	0.0	0.0	0.0	.3	33.8	66.7	0.	0.	0.
5	5.9	15.0	0.0	0.0	0.0	.4	37.8	64.3	0.	0.	0.
6	5.9	15.0	0.0	0.0	0.0	.2	18.4	22.9	0.	0.	0.
7	5.9	15.0	0.0	0.0	0.0	.3	25.9	40.7	0.	0.	0.
8	5.9	14.0	0.0	0.0	0.0	.3	26.1	38.9	0.	0.	0.
9	5.9	14.0	0.0	0.0	0.0	.3	23.1	61.2	0.	0.	0.
10	5.9	14.0	0.0	0.0	0.0	.3	18.5	26.7	0.	0.	0.
11	5.9	0.0	0.0	0.0	0.0	.3	19.4	0.0	0.	0.	0.
12	5.9	0.0	0.0	0.0	0.0	.4	31.2	0.0	0.	0.	0.
13	5.9	14.0	0.0	0.0	0.0	.3	23.9	48.1	0.	0.	0.
14	5.9	14.0	0.0	0.0	0.0	.4	32.9	60.9	0.	0.	0.
15	5.9	14.0	0.0	0.0	0.0	.3	32.5	40.1	0.	0.	0.
16	5.9	15.0	0.0	0.0	0.0	.3	25.3	40.6	0.	0.	0.
17	5.9	15.0	0.0	0.0	0.0	.3	27.1	44.2	0.	0.	0.
18	5.9	14.0	0.0	0.0	0.0	.3	22.1	35.6	0.	0.	0.
19	5.9	12.0	0.0	0.0	0.0	.3	27.1	53.4	0.	0.	0.
20	5.9	14.0	0.0	0.0	0.0	.3	28.7	61.6	0.	0.	0.
MEAN	5.9	14.2	0.0	0.0	0.0	.3	26.7	48.0	0.	0.	0.
STD DEV	.0	.7	0.0	0.0	0.0	.0	5.2	13.2	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 28 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	5.9	15.0	46.0	32.0	0.0	.3	30.2	50.5	6.	35.	360.
2	5.9	15.0	35.0	29.0	0.0	.3	33.5	57.1	9.	40.	500.
3	6.0	0.0	92.0	72.0	0.0	.3	26.5	0.0	0.	0.	1200.
4	5.9	15.0	76.0	32.0	0.0	.3	33.2	64.5	6.	50.	595.
5	6.1	16.0	61.0	50.0	0.0	.3	36.1	62.1	8.	55.	640.
6	5.9	16.0	9.0	4.0	0.0	.3	18.6	24.9	6.	4.	8.
7	5.9	16.0	25.0	15.0	0.0	.3	26.5	41.0	8.	9.	112.
8	5.9	15.0	13.0	7.0	0.0	.3	27.0	37.2	4.	15.	96.
9	6.1	15.0	58.0	24.0	0.0	.3	31.2	58.5	7.	40.	370.
10	5.9	15.0	13.0	7.0	0.0	.3	18.7	27.2	3.	3.	9.
11	5.9	0.0	28.0	14.0	0.0	.3	22.9	0.0	0.	0.	95.
12	5.9	0.0	37.0	20.0	0.0	.3	26.5	0.0	0.	0.	88.
13	5.9	16.0	65.0	50.0	0.0	.3	30.3	54.2	7.	50.	1150.
14	5.9	16.0	80.0	73.0	0.0	.3	32.1	63.9	7.	30.	1300.
15	5.9	16.0	51.0	15.0	0.0	.3	32.9	40.3	5.	7.	95.
16	5.9	16.0	31.0	18.0	0.0	.3	25.8	38.9	5.	1.	50.
17	5.9	16.0	38.0	27.0	0.0	.3	24.6	44.6	6.	50.	560.
18	5.9	15.0	61.0	19.0	0.0	.3	25.5	35.3	5.	7.	400.
19	5.9	16.0	50.0	23.0	0.0	.3	36.7	52.3	8.	5.	90.
20	5.9	16.0	42.0	29.0	0.0	.3	32.1	63.0	9.	30.	144.
MEAN	5.9	15.7	48.1	28.0	0.0	.3	28.5	48.0	6.	25.	393.
STD DEV	.1	.5	24.4	19.5	0.0	.0	5.1	12.9	2.	20.	410.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 11 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.4	15.0	0.0	0.0	0.0	.2	22.4	54.2	0.	0.	0.
2	6.1	15.0	0.0	0.0	0.0	.2	31.2	50.9	0.	0.	0.
3	6.1	0.0	0.0	0.0	0.0	.2	31.3	0.0	0.	0.	0.
4	6.2	16.0	0.0	0.0	0.0	.2	33.9	64.2	0.	0.	0.
5	6.2	15.0	0.0	0.0	0.0	.3	28.7	61.2	0.	0.	0.
6	6.4	16.0	0.0	0.0	0.0	.3	21.8	22.8	0.	0.	0.
7	6.2	15.0	0.0	0.0	0.0	.3	25.4	40.1	0.	0.	0.
8	6.3	16.0	0.0	0.0	0.0	.2	26.7	34.5	0.	0.	0.
9	6.3	16.0	0.0	0.0	0.0	.3	23.1	57.2	0.	0.	0.
10	6.3	16.0	0.0	0.0	0.0	.3	18.6	27.0	0.	0.	0.
11	6.1	0.0	0.0	0.0	0.0	.3	23.6	0.0	0.	0.	0.
12	6.2	0.0	0.0	0.0	0.0	.3	31.6	0.0	0.	0.	0.
13	6.3	15.0	0.0	0.0	0.0	.3	35.2	48.4	0.	0.	0.
14	6.2	16.0	0.0	0.0	0.0	.3	28.4	63.4	0.	0.	0.
15	6.2	16.0	0.0	0.0	0.0	.3	26.6	41.2	0.	0.	0.
16	6.2	0.0	0.0	0.0	0.0	.3	25.9	0.0	0.	0.	0.
17	6.1	15.0	0.0	0.0	0.0	.3	29.6	44.6	0.	0.	0.
18	6.1	15.0	0.0	0.0	0.0	.3	22.9	35.1	0.	0.	0.
19	6.2	16.0	0.0	0.0	0.0	.3	35.8	51.5	0.	0.	0.
20	6.1	15.0	0.0	0.0	0.0	.3	32.0	59.6	0.	0.	0.
MEAN	6.2	16.0	0.0	0.0	0.0	.3	27.7	47.2	0.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.0	4.8	12.9	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPP.	LGTH.	CLUMP WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.2	16.0	0.0	0.0	0.0	.2	53.0	8.0	6.	0.	0.
2	6.3	16.0	0.0	0.0	0.0	.3	58.5	11.5	9.	0.	0.
3	6.2	0.0	0.0	0.0	0.0	.3	0.0	21.0	0.	0.	0.
4	6.7	16.0	0.0	0.0	0.0	.3	45.5	9.5	7.	0.	0.
5	6.3	16.0	0.0	0.0	0.0	.2	50.0	10.0	8.	0.	0.
6	6.4	16.0	0.0	0.0	0.0	.2	24.5	4.5	6.	0.	0.
7	6.4	16.0	0.0	0.0	0.0	.2	40.0	8.5	8.	0.	0.
8	6.4	16.0	0.0	0.0	0.0	.2	16.0	0.0	0.	0.	0.
9	6.4	16.0	0.0	0.0	0.0	.2	53.0	8.3	6.	0.	0.
10	6.4	16.0	0.0	0.0	0.0	.1	20.0	3.0	0.	0.	0.
11	6.3	0.0	0.0	0.0	0.0	.3	21.6	0.0	0.	0.	0.
12	6.4	0.0	0.0	0.0	0.0	.2	19.5	.3	0.	0.	0.
13	6.7	16.0	0.0	0.0	0.0	.2	47.0	7.5	6.	0.	0.
14	6.5	16.0	0.0	0.0	0.0	.2	29.5	9.3	7.	0.	0.
15	6.6	16.0	0.0	0.0	0.0	.3	29.5	5.8	5.	0.	0.
16	6.3	10.0	0.0	0.0	0.0	.3	0.0	0.0	0.	0.	0.
17	6.4	16.0	0.0	0.0	0.0	.3	41.0	8.5	7.	0.	0.
18	6.2	0.0	0.0	0.0	0.0	.2	19.2	0.0	0.	0.	0.
19	6.3	0.0	0.0	0.0	0.0	.2	26.8	0.0	0.	0.	0.
20	6.4	16.0	0.0	0.0	0.0	.3	52.5	12.0	9.	0.	0.
MEAN	6.4	15.6	0.0	0.0	0.0	.2	36.0	8.9	7.	0.	0.
STD DEV	.1	1.5	0.0	0.0	0.0	.1	14.4	4.6	1.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA RED WASH

DATE 19 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE KEPR.	CLUMP LGTH.	WIDTH	DIAM.	MAX. LEAF WIDTH	MAX. LEAF HGHT	MAX. SPK HGHT	NO. SPL/ CULM	NO. REPR CULM	NO. VEG CULM
1	6.6	16.0	0.0	0.0	0.0	.2	25.0	0.0	0.	0.	0.
2	6.4	16.0	0.0	0.0	0.0	.2	31.7	0.0	0.	0.	0.
3	6.4	0.0	0.0	0.0	0.0	.2	27.5	0.0	0.	0.	0.
4	6.5	16.0	0.0	0.0	0.0	.2	41.0	0.0	0.	0.	0.
5	6.3	16.0	0.0	0.0	0.0	.2	35.5	0.0	0.	0.	0.
6	6.7	16.0	0.0	0.0	0.0	.1	24.5	0.0	0.	0.	0.
7	6.5	16.0	0.0	0.0	0.0	.2	21.0	0.0	0.	0.	0.
8	6.5	16.0	0.0	0.0	0.0	.2	27.9	0.0	0.	0.	0.
9	6.3	16.0	0.0	0.0	0.0	.2	37.5	0.0	0.	0.	0.
10	6.3	16.0	0.0	0.0	0.0	.1	19.0	0.0	0.	0.	0.
11	6.7	0.0	0.0	0.0	0.0	.1	16.5	0.0	0.	0.	0.
12	6.7	0.0	0.0	0.0	0.0	.2	25.0	0.0	0.	0.	0.
13	6.3	16.0	0.0	0.0	0.0	.3	32.0	0.0	0.	0.	0.
14	6.5	16.0	0.0	0.0	0.0	.3	35.5	0.0	0.	0.	0.
15	6.3	16.0	0.0	0.0	0.0	.3	22.5	0.0	0.	0.	0.
16	6.6	0.0	0.0	0.0	0.0	.3	15.0	0.0	0.	0.	0.
17	6.5	16.0	0.0	0.0	0.0	.3	32.5	0.0	0.	0.	0.
18	6.3	16.0	0.0	0.0	0.0	.2	22.5	0.0	0.	0.	0.
19	6.3	16.0	0.0	0.0	0.0	.3	25.5	0.0	0.	0.	0.
20	6.5	16.0	0.0	0.0	0.0	.2	40.0	0.0	0.	0.	0.
MEAN	6.5	16.0	0.0	0.0	0.0	.2	27.9	0.0	0.	0.	0.
STD DEV	.1	0.0	0.0	0.0	0.0	.1	7.6	0.0	0.	0.	0.

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 13 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	3.1	0.0	21.0	34.0	16.0	0.0	5.	80.	0.0	0.0
2	3.1	0.0	15.0	37.0	10.0	0.0	5.	90.	0.0	0.0
3	2.4	0.0	11.0	33.0	9.0	0.0	2.	40.	0.0	0.0
4	2.3	0.0	31.0	55.0	36.0	0.0	4.	40.	0.0	0.0
5	2.3	0.0	17.0	43.0	20.0	0.0	3.	30.	0.0	0.0
6	2.3	0.0	22.0	49.0	23.0	0.0	3.	70.	0.0	0.0
7	2.3	0.0	41.0	77.0	39.0	0.0	5.	80.	0.0	0.0
8	2.2	0.0	11.0	35.0	22.0	0.0	2.	20.	0.0	0.0
9	2.3	0.0	22.0	44.0	32.0	0.0	4.	60.	0.0	0.0
10	2.3	0.0	24.0	36.0	14.0	0.0	4.	90.	0.0	0.0
11	2.4	0.0	53.0	90.0	75.0	0.0	4.	40.	0.0	0.0
12	2.2	0.0	21.0	48.0	30.0	0.0	3.	30.	0.0	0.0
13	2.3	0.0	40.0	50.0	42.0	0.0	4.	50.	0.0	0.0
14	2.1	0.0	24.0	62.0	43.0	0.0	3.	30.	0.0	0.0
15	2.2	0.0	17.0	17.0	12.0	0.0	3.	40.	0.0	0.0
16	2.3	0.0	18.0	35.0	27.0	0.0	3.	30.	0.0	0.0
17	2.2	0.0	15.0	18.0	8.0	0.0	2.	95.	0.0	0.0
18	2.2	0.0	25.0	31.0	21.0	0.0	3.	30.	0.0	0.0
19	2.3	0.0	32.0	60.0	25.0	0.0	4.	60.	0.0	0.0
20	2.4	0.0	11.0	19.0	14.0	0.0	2.	10.	0.0	0.0
MEAN	2.4	0.0	23.6	43.7	25.9	0.0	3.	51.	0.0	0.0
STD DEV	.3	0.0	11.1	18.7	15.9	0.0	1.	25.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	2.9	0.0	17.0	69.0	43.0	0.0	5.	70.	0.0	0.0
2	2.8	0.0	13.0	0.0	0.0	22.0	2.	5.	0.0	0.0
3	2.9	0.0	12.0	33.0	20.0	0.0	3.	5.	0.0	0.0
4	2.9	0.0	32.0	54.0	38.0	0.0	5.	8.	0.0	0.0
5	2.9	0.0	20.0	62.0	42.0	0.0	5.	10.	0.0	0.0
6	3.0	0.0	22.0	42.0	23.0	0.0	5.	10.	0.0	0.0
7	2.8	0.0	42.0	104.0	80.0	0.0	4.	80.	0.0	0.0
8	2.9	0.0	10.0	38.0	24.0	0.0	3.	15.	0.0	0.0
9	2.8	0.0	18.0	43.0	35.0	0.0	5.	30.	0.0	0.0
10	2.5	0.0	25.0	27.0	20.0	0.0	3.	35.	0.0	0.0
11	2.8	0.0	56.0	90.0	66.0	0.0	5.	15.	0.0	0.0
12	2.9	0.0	19.0	46.0	35.0	0.0	3.	20.	0.0	0.0
13	2.9	0.0	43.0	78.0	48.0	0.0	5.	50.	0.0	0.0
14	2.8	0.0	25.0	56.0	44.0	0.0	3.	10.	0.0	0.0
15	3.0	0.0	15.0	53.0	20.0	0.0	4.	70.	0.0	0.0
16	2.8	0.0	36.0	52.0	30.0	0.0	5.	30.	0.0	0.0
17	2.8	0.0	16.0	28.0	17.0	0.0	2.	15.	0.0	0.0
18	2.7	0.0	26.0	0.0	0.0	30.0	3.	10.	0.0	0.0
19	2.9	0.0	38.0	60.0	28.0	0.0	3.	15.	0.0	0.0
20	2.8	0.0	12.0	0.0	0.0	18.0	3.	0.	0.0	0.0

MEAN	2.8	0.0	24.9	55.0	36.1	23.3	4.	26.	0.0	0.0
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STD DEV	.1	0.0	12.5	21.1	17.1	6.1	1.	24.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 24 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 6 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	3.8	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.7	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.5	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.8	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.7	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.7	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.7	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.8	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.7	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.7	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.7	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 20 JUNE 198

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	4.0	9.1	26.0	33.0	28.0	0.0	4.	60.	.1	14.5
2	3.8	9.0	18.0	24.0	17.0	0.0	2.	10.	0.0	9.5
3	3.9	9.0	20.0	35.0	21.0	0.0	3.	5.	0.0	13.4
4	3.9	9.0	41.0	62.0	45.0	0.0	4.	5.	0.0	14.1
5	3.9	9.1	23.0	48.0	24.0	0.0	4.	10.	0.0	10.4
6	3.8	9.0	32.0	50.0	28.0	0.0	4.	15.	0.0	9.5
7	4.0	0.0	48.0	120.0	67.0	0.0	5.	40.	.1	15.5
8	3.8	0.0	15.0	37.0	24.0	0.0	3.	5.	0.0	7.8
9	3.9	9.0	26.0	50.0	46.0	0.0	4.	30.	0.0	6.6
10	3.8	0.0	22.0	29.0	19.0	0.0	4.	50.	0.0	0.0
11	3.9	9.1	59.0	94.0	69.0	0.0	4.	10.	0.0	16.2
12	3.8	0.0	22.0	48.0	34.0	0.0	4.	15.	0.0	0.0
13	3.8	9.0	54.0	50.0	42.0	0.0	5.	30.	0.0	10.2
14	4.0	9.0	36.0	58.0	45.0	0.0	3.	5.	.1	13.9
15	3.9	9.1	21.0	33.0	14.0	0.0	4.	30.	0.0	8.7
16	3.9	9.1	34.0	40.0	36.0	0.0	4.	20.	0.0	6.0
17	4.0	0.0	13.0	29.0	12.0	0.0	2.	10.	.1	0.0
18	3.9	9.0	31.0	36.0	25.0	0.0	3.	15.	0.0	9.2
19	3.8	9.0	33.0	50.0	33.0	0.0	3.	15.	0.0	6.0
20	3.9	0.0	12.0	20.0	13.0	0.0	2.	2.	0.0	0.0
MEAN	3.9	9.0	29.3	47.3	32.1	0.0	4.	19.	.1	10.7
STD DEV	.1	.0	13.2	23.7	16.3	0.0	1.	16.	.0	3.4

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 3 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.1	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.1	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.1	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.0	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.0	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.1	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.1	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.2	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.0	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.1	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.0	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.1	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 17 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	4.2	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	15.0
2	4.0	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	4.0
3	4.0	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	8.5
4	4.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
5	4.0	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	13.0
6	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	11.0
7	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	16.5
8	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
9	4.1	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	9.0
10	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.1	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	13.0
12	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
13	4.0	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	12.0
14	4.0	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	14.0
15	4.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	10.5
16	4.0	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	8.5
17	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
18	4.0	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	14.0
19	4.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
MEAN	4.1	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	10.9
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.1	3.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 30 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HIGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH

1	4.7	9.6	29.0	47.0	23.0	0.0	4.	15.	0.0	15.6
2	4.6	9.6	21.0	43.0	25.0	0.0	5.	40.	0.0	14.6
3	4.6	9.5	18.0	34.0	20.0	0.0	3.	5.	0.0	8.6
4	4.7	9.7	50.0	54.0	45.0	0.0	4.	5.	0.0	13.2
5	4.6	9.7	28.0	47.0	28.0	0.0	4.	5.	0.0	9.2
6	4.7	9.7	36.0	50.0	28.0	0.0	4.	10.	0.0	10.7
7	4.7	9.7	53.0	124.0	96.0	0.0	5.	40.	0.0	16.7
8	4.7	9.6	18.0	38.0	28.0	0.0	3.	5.	0.0	9.5
9	4.6	9.6	30.0	58.0	40.0	0.0	4.	25.	0.0	6.3
10	4.8	0.0	24.0	28.0	20.0	0.0	3.	40.	0.0	0.0
11	4.8	9.7	66.0	99.0	80.0	0.0	4.	10.	0.0	13.5
12	4.7	9.6	26.0	49.0	36.0	0.0	3.	15.	0.0	6.7
13	4.8	9.6	54.0	74.0	56.0	0.0	5.	40.	0.0	11.5
14	4.7	9.6	36.0	70.0	60.0	0.0	4.	2.	0.0	15.2
15	4.7	9.7	25.0	34.0	19.0	0.0	3.	30.	0.0	9.5
16	4.7	9.7	35.0	55.0	44.0	0.0	3.	20.	0.0	14.0
17	4.8	0.0	10.0	30.0	10.0	0.0	2.	10.	0.0	0.0
18	4.8	9.7	30.0	38.0	34.0	0.0	3.	25.	0.0	11.1
19	4.7	9.6	35.0	60.0	33.0	0.0	3.	10.	0.0	8.3
20	4.7	0.0	12.0	23.0	16.0	0.0	2.	2.	0.0	0.0

MEAN	4.7	9.6	31.8	52.8	37.1	0.0	4.	18.	0.0	11.4
STD DEV	.1	.1	14.6	24.5	21.8	0.0	1.	14.	0.0	3.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 29 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	17.4
2	5.4	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	10.2
3	5.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	11.2
4	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	.2	18.2
5	5.4	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.8
6	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	12.3
7	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
8	5.5	10.1	0.0	0.0	0.0	0.0	0.	0.	.3	16.8
9	5.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	10.3
10	5.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
11	5.4	9.9	0.0	0.0	0.0	0.0	0.	0.	.3	16.2
12	5.4	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	15.6
13	5.3	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	14.9
14	5.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	16.1
15	5.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	10.5
16	5.4	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	13.3
17	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
18	5.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	13.2
19	5.3	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	7.3
20	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0

MEAN	5.4	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	13.3
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STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.1	3.2
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0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	5.5	11.7	0.0	0.0	0.0	0.0	0.	0.	0.0	15.3
2	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	0.0	11.2
3	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	0.0	10.0
4	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	0.0	15.6
5	5.6	11.7	0.0	0.0	0.0	0.0	0.	0.	0.0	12.1
6	5.6	11.7	0.0	0.0	0.0	0.0	0.	0.	0.0	10.4
7	5.6	11.6	0.0	0.0	0.0	0.0	0.	0.	0.0	17.6
8	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	5.7	11.7	0.0	0.0	0.0	0.0	0.	0.	0.0	10.9
10	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	0.0	16.7
12	5.6	11.6	0.0	0.0	0.0	0.0	0.	0.	0.0	8.2
13	5.7	11.7	0.0	0.0	0.0	0.0	0.	0.	0.0	13.3
14	5.6	11.6	0.0	0.0	0.0	0.0	0.	0.	0.0	18.5
15	5.6	10.0	0.0	0.0	0.0	0.0	0.	0.	0.0	9.8
16	5.6	11.7	0.0	0.0	0.0	0.0	0.	0.	0.0	9.9
17	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	0.0	6.4
19	5.6	11.6	0.0	0.0	0.0	0.0	0.	0.	0.0	3.4
20	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	5.7	11.6	0.0	0.0	0.0	0.0	0.	0.	0.0	11.8
STD DEV	.1	.4	0.0	0.0	0.0	0.0	0.	0.	0.0	4.1

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 25 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	2.8	0.0	5.5	12.0	10.0	0.0	2.	5.	0.0	0.0
2	2.5	0.0	13.0	17.0	12.0	0.0	3.	30.	0.0	0.0
3	2.9	0.0	19.0	27.0	12.0	0.0	3.	40.	0.0	0.0
4	2.4	0.0	11.0	30.0	14.0	0.0	3.	20.	0.0	0.0
5	2.5	0.0	6.0	16.0	10.0	0.0	2.	10.	0.0	0.0
6	2.3	0.0	7.0	12.0	9.0	0.0	3.	80.	0.0	0.0
7	2.4	0.0	16.0	25.0	17.0	0.0	4.	30.	0.0	0.0
8	2.3	0.0	9.0	20.0	11.0	0.0	3.	40.	0.0	0.0
9	2.4	0.0	13.0	27.0	16.0	0.0	4.	30.	0.0	0.0
10	2.5	0.0	11.0	14.0	8.0	0.0	5.	80.	0.0	0.0
11	2.2	0.0	8.0	23.0	11.0	0.0	5.	80.	0.0	0.0
12	2.3	0.0	9.0	19.0	10.0	0.0	3.	50.	0.0	0.0
13	2.3	0.0	15.0	34.0	21.0	0.0	4.	70.	0.0	0.0
14	2.3	0.0	8.0	24.0	10.0	0.0	5.	70.	0.0	0.0
15	2.3	0.0	12.0	57.0	37.0	0.0	4.	30.	0.0	0.0
16	2.3	0.0	7.0	17.0	15.0	0.0	5.	80.	0.0	0.0
17	2.3	0.0	10.0	31.0	20.0	0.0	3.	20.	0.0	0.0
18	2.6	0.0	17.0	44.0	29.0	0.0	4.	50.	0.0	0.0
19	2.4	0.0	11.0	25.0	12.0	0.0	3.	15.	0.0	0.0
20	2.5	0.0	5.0	10.0	6.0	0.0	2.	10.	0.0	0.0

MEAN	2.4	0.0	10.8	24.2	14.5	0.0	4.	42.	0.0	0.0
STD DEV	.2	0.0	3.8	11.4	7.5	0.0	1.	26.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
1	3.7	0.0	2.0	0.0	0.0	12.0	3.	10.	0.0	0.0
2	3.6	0.0	9.0	0.0	0.0	12.0	4.	40.	0.0	0.0
3	3.5	0.0	9.0	0.0	0.0	10.0	4.	15.	0.0	0.0
4	3.6	0.0	10.0	38.0	20.0	0.0	4.	15.	0.0	0.0
5	3.4	0.0	8.0	0.0	0.0	10.0	3.	3.	0.0	0.0
6	3.3	0.0	8.0	0.0	0.0	10.0	5.	60.	0.0	0.0
7	3.4	0.0	10.0	40.0	15.0	0.0	4.	10.	0.0	0.0
8	3.5	0.0	10.0	0.0	0.0	18.0	4.	15.	0.0	0.0
9	3.4	0.0	10.0	35.0	15.0	0.0	4.	25.	0.0	0.0
10	3.3	0.0	13.0	0.0	0.0	10.0	5.	75.	0.0	0.0
11	3.8	0.0	8.0	40.0	9.0	0.0	5.	50.	0.0	0.0
12	3.5	0.0	8.0	0.0	0.0	14.0	5.	50.	0.0	0.0
13	3.7	0.0	8.0	0.0	0.0	28.0	5.	60.	0.0	0.0
14	3.7	0.0	7.0	0.0	0.0	13.0	5.	80.	0.0	0.0
15	3.8	0.0	10.0	0.0	0.0	35.0	4.	10.	0.0	0.0
16	3.4	0.0	5.0	0.0	0.0	12.0	5.	40.	0.0	0.0
17	3.2	0.0	10.0	0.0	0.0	18.0	4.	5.	0.0	0.0
18	3.7	0.0	14.0	0.0	0.0	20.0	5.	40.	0.0	0.0
19	3.5	0.0	10.0	0.0	0.0	17.0	4.	15.	0.0	0.0
20	3.7	0.0	4.0	0.0	0.0	6.0	3.	3.	0.0	0.0
MEAN	3.5	0.0	9.7	38.3	14.8	15.3	4.	31.	0.0	0.0
STD DEV	.2	0.0	2.8	2.4	4.5	7.4	1.	25.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 25 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 2 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HIGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH

1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	3.8	0.0	10.0	16.0	15.0	0.0	2.	2.	0.0	2.3
2	3.7	0.0	13.0	17.0	15.0	0.0	5.	40.	0.0	3.8
3	3.7	0.0	17.0	16.0	12.0	0.0	5.	60.	0.0	5.4
4	3.8	0.0	15.0	33.0	23.0	0.0	3.	10.	0.0	8.0
5	3.8	0.0	15.0	20.0	14.0	0.0	3.	2.	0.0	6.3
6	3.9	0.0	12.0	30.0	15.0	0.0	5.	50.	0.0	5.1
7	3.8	0.0	21.0	38.0	27.0	0.0	4.	10.	0.0	6.1
8	3.8	0.0	14.0	23.0	17.0	0.0	3.	15.	0.0	6.3
9	3.7	0.0	15.0	25.0	18.0	0.0	3.	10.	0.0	7.8
10	3.9	0.0	10.0	26.0	17.0	0.0	5.	75.	0.0	5.1
11	3.8	0.0	13.0	40.0	27.0	0.0	5.	55.	0.0	3.7
12	3.7	0.0	11.0	27.0	18.0	0.0	5.	30.	0.0	1.6
13	3.9	0.0	16.0	35.0	28.0	0.0	4.	50.	0.0	4.2
14	3.8	0.0	7.0	32.0	21.0	0.0	5.	70.	0.0	5.6
15	3.8	0.0	19.0	53.0	43.0	0.0	3.	5.	0.0	8.6
16	3.7	0.0	14.0	25.0	13.0	0.0	5.	40.	0.0	8.7
17	3.9	0.0	12.0	33.0	21.0	0.0	3.	5.	0.0	5.3
18	3.8	0.0	18.0	48.0	34.0	0.0	4.	45.	0.0	5.2
19	3.9	0.0	20.0	25.0	23.0	0.0	3.	10.	0.0	7.8
20	3.7	0.0	5.0	9.0	7.0	0.0	2.	2.	0.0	1.1
MEAN	3.8	0.0	13.9	28.6	20.4	0.0	4.	29.	0.0	5.5
STD DEV	.1	0.0	4.1	10.9	8.3	0.0	1.	25.	0.0	2.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
2	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.8
3	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.1
4	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	8.6
5	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
6	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	6.2
7	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.6
8	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	4.8
9	3.9	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	9.9
10	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.2
11	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	6.1
12	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	3.2
13	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	6.8
14	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
15	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	14.1
16	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1
17	3.9	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	7.6
18	3.9	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
19	4.0	11.0	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
20	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.9	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	6.9
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STD DEV	.1	.5	0.0	0.0	0.0	0.0	0.	0.	.0	2.7
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0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 13 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
2	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	12.3
3	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	9.1
4	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	9.3
5	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
6	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	6.7
7	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	6.2
8	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.3	8.1
9	4.3	9.6	0.0	0.0	0.0	0.0	0.	0.	.2	10.4
10	4.5	9.1	0.0	0.0	0.0	0.0	0.	0.	.2	7.8
11	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	6.9
12	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	9.4
13	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	13.1
14	4.5	9.1	0.0	0.0	0.0	0.0	0.	0.	.2	9.4
15	4.7	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	8.8
16	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	.3	9.0
17	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.4	7.8
18	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	7.5
19	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	7.3
20	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
MEAN	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.2	8.9
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.1	1.9

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA DWL DRAW

DATE 28 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HIGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH

1	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	10.0
2	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	15.0
3	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	7.1
4	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.2
5	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	5.8
6	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	9.2
7	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	8.9
8	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
9	4.4	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	5.5
10	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	13.2
11	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
12	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	6.5
13	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	4.1
14	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	9.5
15	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	13.6
16	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5
17	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
18	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	3.4
19	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.4
20	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	7.6
MEAN	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 26 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	5.2	9.9	0.0	0.0	0.0	0.0	0.	0.	.3	12.5
2	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	5.0
3	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
4	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
5	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.5
6	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	9.0
7	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.0
8	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
9	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
10	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.0
11	4.9	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	5.5
12	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	12.5
13	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
14	4.9	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	10.0
15	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.5
16	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
17	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.5
18	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.0
19	4.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.0
20	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	8.5
MEAN	4.9	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	6.0
STD DEV	.2	.1	0.0	0.0	0.0	0.0	0.	0.	.1	3.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 5 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	5.0	10.2	0.0	0.0	0.0	0.0	0.	0.	0.0	4.7
3	5.0	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.1
4	5.1	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	9.0
5	5.0	10.5	0.0	0.0	0.0	0.0	0.	0.	0.0	10.1
6	5.0	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1
7	5.1	10.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.1
8	5.1	10.5	0.0	0.0	0.0	0.0	0.	0.	0.0	9.8
9	5.0	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.9
10	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	6.5
12	5.0	10.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.1
13	5.1	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	4.8
14	5.0	10.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.8
15	5.0	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	19.1
16	5.0	10.5	0.0	0.0	0.0	0.0	0.	0.	0.0	11.1
17	5.1	10.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5
18	5.0	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	5.1
19	5.1	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.3
20	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	5.1	10.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.9
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	0.0	3.8

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	6.2	0.0	10.3	15.9	15.3	0.0	2.	10.	.2	0.0
2	6.1	11.8	13.1	17.6	12.5	0.0	3.	30.	.2	8.3
3	6.0	11.2	10.0	14.8	7.4	0.0	2.	20.	.1	6.2
4	6.2	11.4	11.3	31.3	21.0	0.0	3.	15.	.2	10.7
5	6.1	11.0	13.1	22.3	13.0	0.0	3.	10.	.2	12.2
6	6.1	10.9	11.4	26.1	9.9	0.0	4.	60.	.2	7.2
7	6.3	11.5	23.0	25.4	16.6	0.0	4.	15.	.2	7.9
8	6.2	11.7	18.2	24.3	17.3	0.0	3.	25.	.2	11.3
9	6.2	11.6	18.0	23.5	16.8	0.0	3.	15.	.3	13.0
10	6.1	0.0	9.9	10.3	17.6	0.0	5.	75.	.1	0.0
11	6.2	11.1	7.2	34.7	12.3	0.0	5.	70.	.2	5.3
12	6.0	11.3	7.0	24.8	16.8	0.0	4.	40.	.2	4.6
13	6.0	10.8	15.1	32.4	25.6	0.0	4.	50.	.2	13.2
14	6.1	10.5	8.4	23.0	16.0	0.0	5.	80.	.1	2.7
15	5.8	11.2	26.0	54.3	37.1	0.0	4.	20.	.3	15.1
16	6.1	11.3	14.8	25.2	13.0	0.0	5.	85.	.1	13.1
17	6.0	10.7	12.3	29.8	21.0	0.0	3.	20.	.2	8.7
18	5.9	10.9	15.8	37.0	24.6	0.0	4.	30.	.2	6.4
19	5.9	11.2	24.1	25.8	20.3	0.0	3.	20.	.2	13.3
20	6.1	0.0	5.4	9.9	7.1	0.0	2.	10.	.2	0.0
MEAN	6.1	11.2	13.7	25.4	17.1	0.0	4.	35.	.2	9.4
STD DEV	.1	.4	5.8	10.0	6.9	0.0	1.	25.	.1	3.7

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 19 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISTA NOVA

STUDY AREA SWEETWATER

DATE 22 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HIGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	3.7	0.0	13.0	0.0	0.0	350.0	4.	5.	0.0	6.0
2	3.7	0.0	14.0	61.0	34.0	0.0	4.	25.	0.0	7.0
3	3.8	0.0	12.0	0.0	0.0	33.0	4.	20.	0.0	6.5
4	3.8	0.0	11.0	0.0	0.0	35.0	4.	10.	0.0	8.0
5	3.7	0.0	7.0	10.0	5.0	0.0	3.	0.	0.0	3.0
6	3.8	0.0	9.0	29.0	20.0	0.0	4.	3.	0.0	8.0
7	3.8	0.0	12.0	29.0	15.0	0.0	5.	50.	0.0	3.5
8	4.2	0.0	5.0	18.0	7.0	0.0	5.	40.	0.0	5.0
9	3.7	0.0	20.0	69.0	42.0	0.0	4.	25.	0.0	5.5
10	3.7	0.0	10.0	0.0	0.0	14.0	5.	70.	0.0	6.0
11	3.8	0.0	13.0	0.0	0.0	31.0	4.	5.	0.0	5.5
12	3.8	0.0	14.0	28.0	14.0	0.0	4.	25.	0.0	5.4
13	3.7	0.0	16.0	72.0	57.0	0.0	4.	2.	0.0	7.0
14	3.8	0.0	6.0	0.0	0.0	12.0	4.	0.	0.0	3.0
15	3.8	0.0	6.0	26.0	12.0	0.0	5.	50.	0.0	9.5
16	3.7	0.0	5.0	0.0	0.0	14.0	5.	60.	0.0	4.0
17	3.8	0.0	10.0	0.0	0.0	35.0	4.	5.	0.0	5.0
18	3.9	0.0	6.0	0.0	0.0	32.0	5.	50.	0.0	2.5
19	3.8	0.0	10.0	41.0	29.0	0.0	4.	2.	0.0	10.0
20	3.9	0.0	13.0	34.0	20.0	0.0	4.	8.	0.0	9.5

MEAN	3.8	0.0	10.9	37.9	23.2	62.8	4.	25.	0.0	6.0
STD DEV	.1	0.0	4.2	20.6	15.9	111.5	1.	23.	0.0	2.2

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HIGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.0	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.0	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 16 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.6
2	4.2	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	14.7
3	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.6
4	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	9.7
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	10.0
7	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.4
8	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	8.2
9	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	12.7
10	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	10.3
11	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.6
12	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.1
13	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
14	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.2
15	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	9.6
16	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	3.6
17	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.0
18	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	7.2
19	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	15.0
20	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.2
MEAN	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.1
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.8

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 30 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.3	9.7	12.0	0.0	0.0	49.0	4.	10.	.1	10.5
2	4.6	9.8	23.0	65.0	39.0	0.0	4.	25.	.2	14.0
3	4.1	9.6	20.0	52.0	27.0	0.0	4.	50.	.1	10.5
4	4.4	9.8	20.0	0.0	0.0	36.0	4.	5.	.1	11.0
5	4.5	0.0	7.0	10.0	5.0	0.0	3.	8.	.1	0.0
6	4.4	9.8	14.0	50.0	26.0	0.0	4.	10.	.1	11.0
7	4.5	0.0	12.0	32.0	10.0	0.0	5.	70.	.1	0.0
8	4.4	9.7	6.0	19.0	5.0	0.0	5.	50.	.1	7.0
9	4.5	9.8	15.0	62.0	38.0	0.0	4.	12.	.1	10.0
10	4.4	9.7	12.0	0.0	0.0	22.0	0.	0.	.1	8.0
11	4.5	0.0	14.0	0.0	0.0	29.0	0.	0.	.1	10.0
12	4.5	9.9	16.0	34.0	18.0	0.0	4.	27.	.1	7.0
13	4.3	9.3	17.0	0.0	0.0	57.0	5.	5.	.1	8.0
14	4.4	9.6	7.0	0.0	0.0	16.0	3.	1.	.1	5.5
15	4.5	9.8	8.0	32.0	16.0	0.0	5.	60.	.1	9.5
16	4.3	9.6	5.0	20.0	13.0	0.0	5.	60.	.1	4.5
17	4.4	9.8	11.0	0.0	0.0	38.0	4.	5.	.1	9.0
18	4.5	9.7	10.0	0.0	0.0	34.0	5.	55.	.1	7.0
19	4.6	9.9	20.0	50.0	19.0	0.0	4.	3.	.1	11.0
20	4.4	9.8	12.0	36.0	20.0	0.0	4.	8.	.1	9.5
MEAN	4.4	9.7	13.1	38.5	19.7	35.1	4.	26.	.1	9.1
STD DEV	.1	.1	5.2	17.4	11.2	13.4	1.	24.	.0	2.3

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 14 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	6.8
2	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	12.6
3	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	3.9
4	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
5	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	9.6
6	4.6	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	13.2
7	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
8	4.0	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1
9	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	11.6
10	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	8.0
11	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	9.7
12	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	12.3
13	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1
14	4.0	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	6.2
15	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	9.7
16	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	4.3
17	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	8.0
18	4.0	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	5.3
19	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	12.2
20	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	5.7

MEAN	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	8.7
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STD DEV	.0	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.6
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0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 29 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.9	10.2	0.0	0.0	0.0	0.0	0.	0.	.7	10.7
2	4.8	10.1	0.0	0.0	0.0	0.0	0.	0.	.4	12.8
3	4.7	10.4	0.0	0.0	0.0	0.0	0.	0.	.2	10.3
4	4.7	10.3	0.0	0.0	0.0	0.0	0.	0.	.3	12.1
5	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
6	4.8	10.5	0.0	0.0	0.0	0.0	0.	0.	.4	15.1
7	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
8	4.9	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	9.1
9	4.8	10.6	0.0	0.0	0.0	0.0	0.	0.	.5	13.0
10	5.1	9.9	0.0	0.0	0.0	0.0	0.	0.	.4	8.3
11	5.0	10.3	0.0	0.0	0.0	0.0	0.	0.	.5	8.8
12	5.1	10.8	0.0	0.0	0.0	0.0	0.	0.	.5	12.7
13	5.0	10.2	0.0	0.0	0.0	0.0	0.	0.	.8	7.8
14	4.9	10.1	0.0	0.0	0.0	0.0	0.	0.	.3	7.9
15	4.8	10.4	0.0	0.0	0.0	0.0	0.	0.	.3	9.8
16	5.0	9.1	0.0	0.0	0.0	0.0	0.	0.	.2	5.1
17	5.0	10.3	0.0	0.0	0.0	0.0	0.	0.	.5	10.1
18	5.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	7.6
19	5.3	10.2	0.0	0.0	0.0	0.0	0.	0.	.5	15.2
20	5.1	11.3	0.0	0.0	0.0	0.0	0.	0.	.4	13.2

MEAN	4.9	10.2	0.0	0.0	0.0	0.0	0.	0.	.4	10.5
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STD DEV	.2	.5	0.0	0.0	0.0	0.0	0.	0.	.2	2.8
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0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA SWEETWATER

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	5.4	13.1	0.0	0.0	0.0	0.0	0.	0.	.3	10.5
2	5.5	13.3	0.0	0.0	0.0	0.0	0.	0.	.9	11.5
3	5.6	13.3	0.0	0.0	0.0	0.0	0.	0.	1.1	10.2
4	5.6	13.2	0.0	0.0	0.0	0.0	0.	0.	1.2	11.3
5	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
6	5.7	13.4	0.0	0.0	0.0	0.0	0.	0.	1.0	13.2
7	6.0	13.5	0.0	0.0	0.0	0.0	0.	0.	.9	6.4
8	6.0	16.9	0.0	0.0	0.0	0.0	0.	0.	.5	4.1
9	5.7	13.9	0.0	0.0	0.0	0.0	0.	0.	1.2	11.8
10	5.7	13.8	0.0	0.0	0.0	0.0	0.	0.	.7	7.7
11	5.8	13.6	0.0	0.0	0.0	0.0	0.	0.	1.3	9.5
12	6.0	13.9	0.0	0.0	0.0	0.0	0.	0.	1.2	12.5
13	5.9	13.6	0.0	0.0	0.0	0.0	0.	0.	1.1	8.7
14	6.0	13.7	0.0	0.0	0.0	0.0	0.	0.	1.3	7.5
15	5.7	13.6	0.0	0.0	0.0	0.0	0.	0.	1.1	7.8
16	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	4.2
17	5.7	13.1	0.0	0.0	0.0	0.0	0.	0.	.9	9.8
18	5.6	13.4	0.0	0.0	0.0	0.0	0.	0.	.7	7.0
19	5.0	14.1	0.0	0.0	0.0	0.0	0.	0.	1.1	15.2
20	5.9	13.8	0.0	0.0	0.0	0.0	0.	0.	1.0	11.7

MEAN	5.8	13.7	0.0	0.0	0.0	0.0	0.	0.	1.0	9.5
STD DEV	.2	.3	0.0	0.0	0.0	0.0	0.	0.	.2	3.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 13 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	2.2	0.0	18.0	23.0	11.0	0.0	3.	40.	0.0	0.0
2	2.1	0.0	9.0	16.0	16.0	0.0	2.	10.	0.0	0.0
3	2.2	0.0	10.0	21.0	8.0	0.0	3.	70.	0.0	0.0
4	2.2	0.0	19.0	34.0	29.0	0.0	2.	10.	0.0	0.0
5	2.1	0.0	34.0	74.0	24.0	0.0	4.	20.	0.0	0.0
6	2.3	0.0	22.0	36.0	24.0	0.0	3.	30.	0.0	0.0
7	2.2	0.0	15.0	18.0	12.0	0.0	2.	20.	0.0	0.0
8	2.2	0.0	32.0	66.0	34.0	0.0	4.	30.	0.0	0.0
9	2.3	0.0	12.0	27.0	15.0	0.0	2.	40.	0.0	0.0
10	2.2	0.0	17.0	28.0	7.0	0.0	2.	80.	0.0	0.0
11	2.3	0.0	28.0	52.0	35.0	0.0	3.	30.	0.0	0.0
12	2.2	0.0	11.0	12.0	8.0	0.0	2.	30.	0.0	0.0
13	2.3	0.0	13.0	30.0	14.0	0.0	2.	20.	0.0	0.0
14	2.3	0.0	27.0	26.0	19.0	0.0	3.	15.	0.0	0.0
15	2.2	0.0	26.0	44.0	23.0	0.0	3.	60.	0.0	0.0
16	2.4	0.0	18.0	16.0	14.0	0.0	2.	40.	0.0	0.0
17	2.3	0.0	48.0	55.0	31.0	0.0	4.	20.	0.0	0.0
18	2.3	0.0	53.0	90.0	65.0	0.0	4.	70.	0.0	0.0
19	2.2	0.0	36.0	76.0	31.0	0.0	4.	60.	0.0	0.0
20	2.1	0.0	16.0	25.0	9.0	0.0	2.	80.	0.0	0.0

MEAN	2.2	0.0	23.2	38.5	21.5	0.0	3.	39.	0.0	0.0
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STD DEV	.1	0.0	12.3	22.9	13.8	0.0	1.	23.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 27 APRIL 1980

PLANT No.	PHENOLOGICAL STAGE	SCORE VEG. PEPP.	PLANT HIGHT	PLANT LNETH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNETH	NEW SEED STALK LNETH
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1	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	3.2	0.0	26.0	33.0	23.0	0.0	4.	45.	0.0	0.0
2	3.1	0.0	9.0	16.0	12.0	0.0	3.	5.	0.0	0.0
3	3.0	0.0	24.0	30.0	20.0	0.0	4.	90.	0.0	0.0
4	3.0	0.0	17.0	31.0	22.0	0.0	3.	5.	0.0	0.0
5	3.0	0.0	33.0	56.0	42.0	0.0	5.	15.	0.0	0.0
6	3.9	0.0	19.0	32.0	24.0	0.0	5.	10.	0.0	0.0
7	3.0	0.0	14.0	0.0	0.0	12.0	2.	2.	0.0	0.0
8	3.1	0.0	31.0	62.0	37.0	0.0	5.	5.	0.0	0.0
9	3.1	0.0	12.0	0.0	0.0	23.0	2.	15.	0.0	0.0
10	2.9	0.0	16.0	0.0	0.0	19.0	2.	95.	0.0	0.0
11	3.1	0.0	24.0	45.0	36.0	0.0	3.	5.	0.0	0.0
12	2.9	0.0	12.0	0.0	0.0	9.0	2.	20.	0.0	0.0
13	3.2	0.0	11.0	0.0	0.0	14.0	2.	5.	0.0	0.0
14	3.1	0.0	26.0	24.0	15.0	0.0	3.	5.	0.0	0.0
15	3.0	0.0	18.0	36.0	26.0	0.0	3.	10.	0.0	0.0
16	3.0	0.0	18.0	35.0	23.0	0.0	4.	60.	0.0	0.0
17	2.9	0.0	46.0	56.0	31.0	0.0	5.	10.	0.0	0.0
18	3.1	0.0	74.0	94.0	82.0	0.0	5.	15.	0.0	0.0
19	3.1	0.0	32.0	56.0	34.0	0.0	5.	50.	0.0	0.0
20	2.9	0.0	14.0	24.0	18.0	0.0	5.	70.	0.0	0.0
MEAN	3.1	0.0	23.8	42.1	29.7	15.4	4.	27.	0.0	0.0
STD DEV	.2	0.0	15.0	19.9	16.8	5.6	1.	30.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 19 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.2	9.2	25.0	34.0	15.0	0.0	3.	40.	.2	3.8
2	4.1	0.0	9.0	18.0	13.0	0.0	2.	15.	.1	0.0
3	4.2	0.0	11.0	24.0	9.0	0.0	5.	90.	.2	0.0
4	4.3	0.0	19.0	32.0	21.0	0.0	3.	5.	.2	0.0
5	4.3	0.0	41.0	74.0	41.0	0.0	4.	20.	.2	0.0
6	4.3	9.1	21.0	29.0	28.0	0.0	3.	20.	.3	8.2
7	4.0	0.0	13.0	21.0	15.0	0.0	2.	15.	.1	0.0
8	4.2	9.2	32.0	71.0	41.0	0.0	4.	25.	.2	5.5
9	4.4	0.0	11.0	28.0	17.0	0.0	2.	40.	.2	0.0
10	4.0	0.0	15.0	30.0	18.0	0.0	2.	15.	.1	1.5
11	3.9	0.0	24.0	51.0	34.0	0.0	3.	15.	0.0	.8
12	3.8	0.0	9.0	15.0	12.0	0.0	2.	30.	0.0	0.0
13	3.9	0.0	12.0	20.0	14.0	0.0	2.	10.	0.0	0.0
14	4.3	9.0	27.0	30.0	20.0	0.0	3.	15.	.3	3.8
15	4.1	0.0	22.0	42.0	29.0	0.0	3.	20.	.1	2.3
16	4.2	9.2	25.0	19.0	11.0	0.0	5.	80.	.2	5.4
17	4.2	9.1	51.0	59.0	52.0	0.0	4.	25.	.2	2.7
18	4.2	9.1	46.0	92.0	53.0	0.0	5.	85.	.2	5.3
19	4.2	9.1	37.0	89.0	26.0	0.0	5.	65.	.2	4.6
20	3.8	0.0	17.0	34.0	12.0	0.0	3.	60.	0.0	0.0

MEAN	4.1	9.1	23.4	41.1	24.1	0.0	3.	35.	.2	4.0
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STD DEV	.2	.1	12.5	23.8	13.6	0.0	1.	27.	.1	2.1
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.2
2	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.1
4	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.8
5	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.6
6	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.6
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	1.9
8	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
9	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	1.3
12	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
13	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	2.1
16	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.6
17	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.0
18	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	6.2
19	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
20	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.2
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	1.5
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RUD KIMBAL

DATE 13 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	.4	2.9
2	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
3	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
4	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
5	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
6	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.4	4.7
7	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
8	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	3.2
9	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
10	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
11	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
12	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
13	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
14	4.7	9.5	0.0	0.0	0.0	0.0	0.	0.	.3	4.4
15	4.7	9.5	0.0	0.0	0.0	0.0	0.	0.	.4	4.2
16	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.5	4.2
17	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.4	3.6
18	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.3	5.3
19	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
20	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0

MEAN	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.3	4.1
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.1	.8
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0.0 = NOT RECORDED

ARTENISIA TRIDENTATA

STUDY AREA RUD KIMBAL

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.5	9.3	20.0	40.0	24.0	0.0	4.	20.	1.6	6.7
2	4.5	9.3	20.0	16.0	12.0	0.0	2.	5.	1.3	0.0
3	4.5	9.3	23.0	39.0	35.0	0.0	3.	80.	1.2	0.0
4	4.5	9.3	20.0	32.0	22.0	0.0	3.	5.	1.7	0.0
5	4.6	9.3	34.0	61.0	43.0	0.0	4.	15.	1.2	4.2
6	4.6	9.4	18.0	35.0	26.0	0.0	4.	15.	1.0	3.2
7	4.6	9.3	13.0	13.0	16.0	0.0	2.	5.	2.0	0.0
8	4.5	9.3	30.0	40.0	36.0	0.0	4.	5.	1.2	4.8
9	4.7	9.3	10.0	26.0	22.0	0.0	2.	10.	1.5	0.0
10	4.5	9.3	13.0	24.0	17.0	0.0	2.	5.	1.1	0.0
11	4.6	9.3	22.0	45.0	42.0	0.0	3.	5.	1.2	0.0
12	4.5	9.3	12.0	13.0	11.0	0.0	2.	10.	.7	0.0
13	4.6	9.3	11.0	20.0	12.0	0.0	3.	5.	1.5	0.0
14	4.7	9.3	29.0	27.0	19.0	0.0	3.	5.	1.7	5.4
15	4.6	9.3	23.0	50.0	34.0	0.0	4.	10.	2.0	2.6
16	4.5	9.4	23.0	16.0	12.0	0.0	3.	10.	1.7	2.1
17	4.6	9.4	50.0	58.0	51.0	0.0	4.	10.	1.6	5.1
18	4.7	9.4	74.0	90.0	90.0	0.0	4.	25.	2.1	5.2
19	4.6	9.4	39.0	62.0	62.0	0.0	5.	35.	1.0	2.6
20	4.6	9.3	13.0	23.0	15.0	0.0	3.	50.	1.1	0.0

MEAN	4.6	9.4	24.6	37.9	30.1	0.0	3.	17.	1.4	4.2
STD DEV	.1	.2	15.2	21.6	20.0	0.0	1.	19.	.4	1.5

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA BUD KIMBAL

DATE 6 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	5.9
2	5.0	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
3	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
4	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
5	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
6	5.0	9.9	0.0	0.0	0.0	0.0	0.	0.	1.4	3.1
7	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
8	5.1	9.9	0.0	0.0	0.0	0.0	0.	0.	1.3	3.7
9	5.0	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	0.0
10	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
11	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
12	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
13	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
14	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	6.2
15	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	3.1
16	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	5.1
17	5.0	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	3.9
18	5.1	9.5	0.0	0.0	0.0	0.0	0.	0.	1.8	5.0
19	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.4	0.0
20	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0

MEAN	5.1	9.8	0.0	0.0	0.0	0.0	0.	0.	1.2	4.5
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.3	1.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RUD KIMBAL

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	2.2	0.0
2	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
3	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
4	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
5	5.4	10.0	0.0	0.0	0.0	0.0	0.	0.	1.1	2.5
6	5.4	11.6	0.0	0.0	0.0	0.0	0.	0.	1.0	3.0
7	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
8	5.5	10.9	0.0	0.0	0.0	0.0	0.	0.	.6	3.1
9	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
10	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
11	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
12	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
13	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
14	5.4	10.5	0.0	0.0	0.0	0.0	0.	0.	2.0	6.2
15	5.4	10.4	0.0	0.0	0.0	0.0	0.	0.	1.8	3.8
16	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	3.1
17	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	4.2
18	5.4	10.7	0.0	0.0	0.0	0.0	0.	0.	1.0	5.5
19	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
20	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0

MEAN	5.5	10.7	0.0	0.0	0.0	0.0	0.	0.	1.2	4.2
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STD DEV	.1	.5	0.0	0.0	0.0	0.0	0.	0.	.5	1.3
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	3.2	0.0	11.0	13.0	9.0	0.0	2.	20.	0.0	0.0
2	3.4	0.0	17.0	36.0	8.0	0.0	5.	55.	0.0	0.0
3	3.4	0.0	26.0	96.0	80.0	0.0	4.	25.	0.0	0.0
4	3.2	0.0	6.0	5.0	8.0	0.0	2.	10.	0.0	0.0
5	3.1	0.0	19.0	23.0	14.0	0.0	4.	20.	0.0	0.0
6	3.4	0.0	20.0	28.0	17.0	0.0	3.	5.	0.0	0.0
7	3.1	0.0	32.0	60.0	30.0	0.0	3.	5.	0.0	0.0
8	3.4	0.0	26.0	0.0	0.0	30.0	3.	5.	0.0	0.0
9	3.5	0.0	32.0	95.0	60.0	0.0	4.	25.	0.0	0.0
10	3.2	0.0	46.0	100.0	72.0	0.0	4.	5.	0.0	0.0
11	3.3	0.0	40.0	97.0	58.0	0.0	4.	5.	0.0	0.0
12	3.1	0.0	10.0	10.0	6.0	0.0	2.	5.	0.0	0.0
13	3.2	0.0	38.0	110.0	90.0	0.0	4.	10.	0.0	0.0
14	3.1	0.0	22.0	36.0	28.0	0.0	3.	5.	0.0	0.0
15	3.1	0.0	22.0	50.0	30.0	0.0	4.	10.	0.0	0.0
16	3.2	0.0	22.0	37.0	14.0	0.0	3.	5.	0.0	0.0
17	3.1	0.0	36.0	70.0	50.0	0.0	4.	20.	0.0	0.0
18	3.3	0.0	20.0	19.0	14.0	0.0	2.	0.	0.0	0.0
19	3.2	0.0	38.0	40.0	36.0	0.0	4.	25.	0.0	0.0
20	3.1	0.0	38.0	79.0	58.0	0.0	4.	5.	0.0	0.0
MEAN	3.2	0.0	26.1	52.8	35.9	30.0	3.	14.	0.0	0.0
STD DEV	.1	0.0	11.1	34.5	26.9	0.0	1.	13.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 2 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 19 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 2 JUNE 1980

 PLANT PHENOLOGICAL
 NO. STAGE SCORE
 VEG. REPR.

 PLANT
 HGT

 PLANT
 LGTH

 PLANT
 WIDTH

 PLANT
 DIAM

 PLANT
 AGE
 CLASS

 DEAD
 BRANCH
 PERCENT

 NEW
 VEG.
 TWIG

 NEW
 SEED
 STALK

LGTH LGTH

1	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 16 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
1	4.1	0.0	42.0	110.0	65.0	0.0	4.	5.	.1	11.0
2	4.2	0.0	19.0	21.0	20.0	0.0	5.	40.	.2	4.0
3	4.0	0.0	39.0	43.0	24.0	0.0	4.	3.	.1	9.5
4	4.2	0.0	10.0	0.0	0.0	8.0	3.	10.	.2	4.0
5	4.1	0.0	26.0	23.0	17.0	0.0	4.	5.	.1	9.0
6	4.2	0.0	33.0	0.0	0.0	28.0	4.	1.	.2	8.5
7	4.0	0.0	39.0	58.0	42.0	0.0	4.	7.	.1	12.0
8	4.1	0.0	40.0	0.0	0.0	32.0	4.	1.	.1	14.0
9	4.3	0.0	44.0	98.0	39.0	0.0	4.	20.	.2	11.0
10	4.2	0.0	51.0	0.0	0.0	84.0	4.	10.	.2	14.0
11	4.1	0.0	49.0	96.0	62.0	0.0	4.	3.	.1	15.5
12	4.0	0.0	10.0	0.0	0.0	9.0	3.	15.	.1	7.0
13	4.1	0.0	52.0	0.0	0.0	88.0	4.	1.	.1	7.5
14	4.1	0.0	30.0	47.0	32.0	0.0	4.	2.	.2	9.5
15	4.1	0.0	37.0	46.0	28.0	0.0	4.	10.	.1	9.0
16	4.2	0.0	36.0	41.0	21.0	0.0	4.	3.	.2	11.5
17	4.2	0.0	45.0	0.0	0.0	83.0	4.	10.	.2	9.5
18	4.1	0.0	26.0	31.0	19.0	0.0	3.	0.	.1	9.0
19	4.1	0.0	42.0	43.0	19.0	0.0	4.	3.	.1	9.5
20	4.0	0.0	41.0	79.0	71.0	0.0	4.	1.	.1	6.5
MEAN	4.1	0.0	35.6	56.6	35.3	41.5	4.	8.	.1	9.6
STD DEV	.1	0.0	12.2	29.6	19.2	37.5	0.	9.	.1	3.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	9.2	0.0	0.0	0.0	0.0	0.	1.	0.0	0.0
4	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.2	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.2	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.1	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN 4.2 9.4 0.0 0.0 0.0 0.0 0. 0. 0.0 0.0

STD DEV .1 .2 0.0 0.0 0.0 0.0 0. 0. 0.0 0.0

0.0 = NOT RECORDED

251157

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.3	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
2	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	.2	4.0
3	4.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	17.5
4	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
5	4.4	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	18.0
6	4.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
7	4.1	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	25.0
8	4.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	18.5
9	4.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	22.0
10	4.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	23.3
11	4.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	13.0
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	10.5
13	4.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.3	15.0
14	4.3	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.5
15	4.4	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	11.0
16	4.1	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	20.0
17	4.1	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	15.0
18	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	10.0
19	4.3	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.0
20	4.1	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	21.0

MEAN	4.3	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.6
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STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	.1	5.4
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 28 JULY 1982

PLANT NO.	PHENOLOGICAL STAG: VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.7	9.7	7.5	18.5	14.0	0.0	2.	8.	.3	7.4
2	4.6	9.7	16.5	33.0	26.0	0.0	4.	45.	.2	5.0
3	4.7	9.8	49.0	47.0	29.4	0.0	4.	3.	.2	15.5
4	4.6	0.0	11.5	0.0	6.1	8.0	2.	12.	.2	0.0
5	4.6	9.7	34.5	20.5	18.0	0.0	4.	5.	.4	15.4
6	4.6	9.8	37.5	33.0	29.0	0.0	4.	2.	.3	16.2
7	4.7	9.8	46.2	72.0	47.0	0.0	4.	12.	.2	14.7
8	4.7	9.8	47.0	0.0	0.0	35.3	4.	4.	.3	17.5
9	4.6	9.8	58.3	105.0	64.1	0.0	4.	27.	.2	16.6
10	4.6	9.8	63.0	0.0	0.0	94.5	4.	3.	.2	28.5
11	4.6	9.7	65.5	115.0	65.0	0.0	4.	5.	.2	20.3
12	4.5	9.7	47.0	65.5	30.1	0.0	4.	10.	.3	15.3
13	4.5	9.6	56.0	112.0	80.2	0.0	4.	2.	.2	14.9
14	4.6	9.8	42.0	0.0	0.0	39.2	4.	5.	.1	17.9
15	4.5	9.7	38.0	52.0	34.5	0.0	4.	12.	.3	18.3
16	4.6	9.3	48.0	43.1	24.0	0.0	4.	2.	.2	17.5
17	4.6	9.8	53.0	98.0	75.0	0.0	4.	7.	.2	13.6
18	4.6	0.0	28.5	28.0	24.5	0.0	3.	2.	.1	0.0
19	4.5	9.3	48.0	45.0	22.0	0.0	4.	5.	.2	16.1
20	4.7	9.8	54.5	78.0	74.0	0.0	4.	6.	.2	16.5

MEAN	4.6	9.8	42.6	60.7	41.2	44.2	4.	9.	.2	16.0
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STD DEV	.1	.1	16.2	32.6	22.1	36.3	1.	10.	.1	4.8
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 3 AUGUST 198

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HTGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.5	9.7	52.0	0.0	0.0	25.0	4.	40.	.1	10.5
2	4.5	9.6	37.0	0.0	0.0	26.0	4.	10.	.2	10.5
3	4.6	9.5	37.0	53.0	38.0	0.0	4.	5.	.1	11.5
4	4.5	9.8	50.0	63.0	51.0	0.0	4.	2.	.1	16.0
5	4.4	9.5	50.0	57.0	34.0	0.0	5.	75.	.1	13.0
6	4.5	9.8	58.0	69.0	51.0	0.0	4.	3.	.1	14.5
7	4.5	9.8	54.0	54.0	43.0	0.0	4.	2.	.2	17.5
8	4.6	9.8	64.0	0.0	0.0	62.0	4.	9.	.1	16.0
9	4.6	9.1	22.0	380.0	11.0	0.0	5.	65.	.1	6.5
10	4.7	9.5	69.0	0.0	0.0	73.0	4.	45.	.1	17.1
11	4.6	9.6	37.0	34.0	20.0	0.0	4.	40.	.2	11.5
12	4.5	0.0	34.0	26.0	12.0	0.0	3.	15.	.1	6.5
13	4.5	9.8	75.0	141.0	99.0	0.0	4.	3.	.1	12.5
14	4.5	9.8	67.0	0.0	0.0	74.0	4.	3.	.1	8.0
15	4.5	9.5	62.0	53.0	25.0	0.0	5.	60.	.1	8.5
16	4.6	9.8	70.0	94.0	59.0	0.0	4.	40.	.1	11.5
17	4.5	9.7	97.0	124.0	107.0	0.0	4.	10.	.1	11.5
18	4.6	9.7	58.0	58.0	37.0	0.0	4.	15.	.4	15.0
19	4.6	9.7	56.0	34.0	59.0	0.0	4.	30.	.1	7.5
20	4.5	9.8	39.0	68.0	18.0	0.0	4.	15.	.1	14.0
MEAN	4.5	9.7	54.9	87.2	44.3	52.0	4.	25.	.1	12.0
STD DEV	.1	.2	17.3	87.0	28.6	24.6	0.	23.	.1	3.4

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 11 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	11.0
2	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
3	4.4	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.5
4	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
5	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	8.5
6	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.0
7	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	13.5
8	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	20.5
9	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	15.5
10	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	26.0
11	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
12	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
13	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
14	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	17.0
15	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	20.0
16	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	19.0
17	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	15.0
18	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	12.0
19	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	17.0
20	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.0
MEAN	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.1
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.1	4.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	11.3
2	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	6.0
3	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
4	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.5
5	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	14.6
6	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	15.0
7	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	17.0
8	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	20.5
9	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	19.5
10	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	22.5
11	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	20.2
12	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	8.5
13	4.7	10.2	0.0	0.0	0.0	0.0	0.	0.	.2	14.5
14	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	17.5
15	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	18.0
16	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	17.5
17	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.5
18	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
19	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	20.5
20	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	18.0

MEAN	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	15.2
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.1	5.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CEDAR MTN

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	5.3	10.7	0.0	0.0	0.0	0.0	0.	0.	.1	13.5
2	5.6	10.8	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
3	5.6	10.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.0
4	5.5	11.2	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
5	5.5	11.0	0.0	0.0	0.0	0.0	0.	0.	.2	13.8
6	5.4	10.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.4
7	5.5	11.4	0.0	0.0	0.0	0.0	0.	0.	.3	14.8
8	5.5	10.6	0.0	0.0	0.0	0.0	0.	0.	.2	19.0
9	5.7	10.7	0.0	0.0	0.0	0.0	0.	0.	.1	20.0
10	5.7	10.8	0.0	0.0	0.0	0.0	0.	0.	.2	19.5
11	5.8	11.4	0.0	0.0	0.0	0.0	0.	0.	.2	21.0
12	5.4	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.5
13	5.7	11.2	0.0	0.0	0.0	0.0	0.	0.	.2	17.3
14	5.7	10.9	0.0	0.0	0.0	0.0	0.	0.	.2	15.5
15	5.8	11.6	0.0	0.0	0.0	0.0	0.	0.	.2	16.0
16	5.8	11.6	0.0	0.0	0.0	0.0	0.	0.	.2	22.5
17	5.5	10.8	0.0	0.0	0.0	0.0	0.	0.	.2	16.5
18	5.4	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	16.0
19	5.8	11.7	0.0	0.0	0.0	0.0	0.	0.	.2	16.5
20	5.8	10.9	0.0	0.0	0.0	0.0	0.	0.	.1	20.5

MEAN 5.6 11.1 0.0 0.0 0.0 0.0 0. 0. .2 15.8

STD DEV .2 .4 0.0 0.0 0.0 0.0 0. 0. .1 4.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 3

DATE 20 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	3.5	0.0	19.0	0.0	0.0	25.0	5.	25.	0.0	0.0
2	3.9	0.0	30.0	0.0	0.0	24.0	5.	15.	0.0	0.0
3	3.8	0.0	34.0	30.0	30.0	0.0	3.	10.	0.0	0.0
4	3.8	0.0	50.0	0.0	0.0	40.0	5.	5.	0.0	0.0
5	3.5	0.0	56.0	50.0	25.0	0.0	4.	70.	0.0	0.0
6	3.4	0.0	68.0	0.0	0.0	20.0	4.	50.	0.0	0.0
7	0.0	0.0	50.0	44.0	30.0	0.0	5.	8.	0.0	0.0
8	3.5	0.0	58.0	60.0	58.0	0.0	5.	10.	0.0	0.0
9	3.9	0.0	24.0	0.0	0.0	20.0	4.	80.	0.0	0.0
10	3.5	0.0	70.0	75.0	60.0	0.0	4.	50.	0.0	0.0
11	3.7	0.0	30.0	20.0	13.0	0.0	4.	50.	0.0	0.0
12	3.8	0.0	29.0	30.0	14.0	0.0	3.	20.	0.0	0.0
13	3.5	0.0	66.0	133.0	50.0	0.0	5.	20.	0.0	0.0
14	3.5	0.0	68.0	66.0	60.0	0.0	5.	5.	0.0	0.0
15	3.6	0.0	50.0	0.0	0.0	30.0	4.	50.	0.0	0.0
16	3.7	0.0	60.0	85.0	43.0	0.0	4.	45.	0.0	0.0
17	3.8	0.0	96.0	0.0	0.0	100.0	5.	5.	0.0	0.0
18	3.8	0.0	45.0	50.0	30.0	0.0	5.	20.	0.0	0.0
19	3.5	0.0	60.0	45.0	35.0	0.0	4.	30.	0.0	0.0
20	3.9	0.0	35.0	56.0	13.0	0.0	3.	15.	0.0	0.0
MEAN	3.7	0.0	49.9	57.3	35.5	37.0	4.	29.	0.0	0.0
STD DEV	.2	0.0	19.3	29.2	17.4	28.6	1.	23.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 3

DATE 11 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 3

DATE 17 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	4.2	0.0	68.0	84.0	63.0	0.0	4.	5.	.2	6.2
2	4.0	0.0	31.0	32.0	28.0	0.0	2.	15.	.1	8.3
3	4.1	0.0	36.0	39.0	34.0	0.0	0.	0.	.1	5.9
4	4.2	0.0	54.0	87.0	51.0	0.0	0.	0.	.2	6.5
5	3.9	0.0	48.0	56.0	32.0	0.0	0.	0.	0.0	5.9
6	3.7	0.0	53.0	25.0	17.0	0.0	0.	0.	0.0	2.2
7	4.2	0.0	54.0	53.0	40.0	0.0	0.	0.	.2	5.5
8	4.1	0.0	58.0	67.0	65.0	0.0	0.	0.	.1	10.2
9	3.8	0.0	27.0	19.0	11.0	0.0	0.	0.	0.0	5.5
10	4.1	0.0	72.0	82.0	53.0	0.0	0.	0.	.1	7.1
11	4.1	0.0	34.0	35.0	16.0	0.0	0.	0.	.1	4.6
12	4.2	0.0	32.0	31.0	17.0	0.0	0.	0.	.2	6.2
13	4.1	0.0	76.0	94.0	79.0	0.0	0.	0.	.1	7.3
14	4.1	0.0	86.0	74.0	62.0	0.0	0.	0.	.1	6.3
15	4.1	0.0	54.0	40.0	24.0	0.0	0.	0.	.1	5.3
16	4.0	0.0	59.0	88.0	32.0	0.0	0.	0.	.1	6.8
17	3.8	0.0	96.0	129.0	102.0	0.0	0.	0.	0.0	5.4
18	4.2	0.0	52.0	59.0	31.0	0.0	0.	0.	.2	7.6
19	3.9	0.0	63.0	43.0	37.0	0.0	0.	0.	0.0	5.2
20	4.1	0.0	38.0	59.0	17.0	0.0	0.	0.	.1	6.5
MEAN	4.0	0.0	54.6	59.8	40.6	0.0	3.	10.	.1	6.2
STD DEV	.2	0.0	18.7	28.2	24.0	0.0	1.	7.	.0	1.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 3

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HTGT	PLANT LGTH	PLANT WIRTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.1	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.0	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.1	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.0	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.4	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	4.2	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 3

DATE 15 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	13.3
2	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	11.3
3	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.4
4	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	14.2
5	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.5
6	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	6.7
7	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	15.0
8	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	12.2
9	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	9.0
10	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	14.5
11	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.5
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.5
13	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.0
14	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.9
15	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
16	4.4	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	12.0
17	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.8
18	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.5
19	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.2
20	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	6.2

MEAN	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.6
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.8
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 2

DATE 12 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG. REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	14.5
2	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
3	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	6.5
4	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	12.5
5	4.7	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
6	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
7	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	.2	13.5
8	4.8	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	20.0
9	4.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
10	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.0
11	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
12	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	14.0
13	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.5
14	4.8	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	11.0
15	4.8	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
16	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	12.0
17	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	11.5
18	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.5
19	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
20	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	6.5

MEAN 4.7 9.7 0.0 0.0 0.0 0.0 0. 0. .1 11.7

STD DEV .1 .1 0.0 0.0 0.0 0.0 0. 0. .1 3.4

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 3

DATE 31 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	18.0
2	4.6	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	11.5
3	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.6
4	4.5	10.0	0.0	0.0	0.0	0.0	0.	0.	.1	18.0
5	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	16.0
6	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
7	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	17.5
8	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	21.2
9	4.5	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
10	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
11	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
12	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
13	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	13.2
14	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	13.3
15	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	9.4
16	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	14.0
17	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	11.5
18	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	13.5
19	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.7	10.6
20	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.7	14.7
MEAN	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.2	4.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA CUMBER. 2

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG.	PEPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	5.4	10.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
2	5.3	10.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	11.2
3	5.4	11.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.2
4	5.4	11.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	18.0
5	5.4	10.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.9
6	5.5	10.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
7	5.4	10.8	0.0	1.0	0.0	0.0	0.0	0.	0.	.2	17.4
8	5.5	11.0	0.0	0.0	0.0	0.0	0.0	1.	0.	.2	14.0
9	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
10	5.3	11.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	17.0
11	5.5	10.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	12.0
12	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
13	6.7	11.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	14.8
14	6.0	10.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
15	5.5	11.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
16	6.7	11.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
17	5.0	10.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
18	5.6	11.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	13.8
19	6.0	11.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	10.3
20	5.5	10.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	15.5

MEAN	5.7	10.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	11.8
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STD DEV	.5	.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.0	3.7
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 12 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	2.5	0.0	23.0	36.0	17.0	0.0	3.	10.	0.0	0.0
2	2.3	0.0	30.0	43.0	38.0	0.0	4.	15.	0.0	0.0
3	2.1	0.0	14.0	26.0	12.0	0.0	4.	60.	0.0	0.0
4	2.4	0.0	15.0	44.0	40.0	0.0	3.	40.	0.0	0.0
5	2.2	0.0	21.0	43.0	28.0	0.0	3.	35.	0.0	0.0
6	2.2	0.0	24.0	48.0	31.0	0.0	3.	40.	0.0	0.0
7	2.1	0.0	12.0	19.0	13.0	0.0	2.	50.	0.0	0.0
8	2.3	0.0	26.0	50.0	34.0	0.0	3.	40.	0.0	0.0
9	2.1	0.0	40.0	48.0	37.0	0.0	3.	10.	0.0	0.0
10	2.5	0.0	49.0	69.0	65.0	0.0	4.	20.	0.0	0.0
11	2.2	0.0	46.0	66.0	40.0	0.0	3.	40.	0.0	0.0
12	2.1	0.0	28.0	54.0	44.0	0.0	3.	30.	0.0	0.0
13	2.1	0.0	24.0	20.0	9.0	0.0	5.	90.	0.0	0.0
14	2.3	0.0	38.0	34.0	22.0	0.0	4.	50.	0.0	0.0
15	2.2	0.0	46.0	38.0	37.0	0.0	5.	70.	0.0	0.0
16	2.3	0.0	22.0	23.0	8.0	0.0	2.	70.	0.0	0.0
17	2.2	0.0	17.0	48.0	25.0	0.0	2.	20.	0.0	0.0
18	2.1	0.0	30.0	53.0	42.0	0.0	3.	30.	0.0	0.0
19	2.3	0.0	20.0	22.0	8.0	0.0	5.	85.	0.0	0.0
20	2.2	0.0	23.0	37.0	29.0	0.0	3.	40.	0.0	0.0
MEAN	2.2	0.0	27.4	41.1	29.0	0.0	3.	42.	0.0	0.0
STD DEV	.1	0.0	11.0	14.3	14.9	0.0	1.	23.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 27 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HIGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH
1	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	3.3	0.0	26.0	36.0	33.0	0.0	3.	10.	0.0	0.0
2	3.4	0.0	38.0	60.0	48.0	0.0	3.	5.	0.0	0.0
3	3.2	0.0	15.0	28.0	20.0	0.0	4.	65.	0.0	0.0
4	3.1	0.0	16.0	40.0	35.0	0.0	3.	30.	0.0	0.0
5	3.1	0.0	21.0	35.0	32.0	0.0	3.	10.	0.0	0.0
6	3.2	0.0	25.0	45.0	24.0	0.0	3.	20.	0.0	0.0
7	3.1	0.0	14.0	25.0	10.0	0.0	3.	70.	0.0	0.0
8	3.1	0.0	24.0	59.0	44.0	0.0	3.	5.	0.0	0.0
9	3.0	0.0	42.0	53.0	41.0	0.0	3.	8.	0.0	0.0
10	3.0	0.0	40.0	70.0	67.0	0.0	5.	3.	0.0	0.0
11	3.1	0.0	44.0	60.0	50.0	0.0	3.	2.	0.0	0.0
12	3.2	0.0	28.0	59.0	53.0	0.0	3.	2.	0.0	0.0
13	2.8	0.0	34.0	72.0	58.0	0.0	4.	90.	0.0	0.0
14	3.2	0.0	38.0	0.0	0.0	26.0	5.	25.	0.0	0.0
15	3.2	0.0	55.0	0.0	0.0	40.0	5.	30.	0.0	0.0
16	3.1	0.0	20.0	0.0	0.0	30.0	4.	65.	0.0	0.0
17	3.2	0.0	13.0	44.0	21.0	0.0	3.	0.	2.0	0.0
18	3.0	0.0	33.0	60.0	50.0	0.0	3.	5.	0.0	0.0
19	3.1	0.0	20.0	45.0	20.0	0.0	4.	60.	0.0	0.0
20	3.2	0.0	27.0	45.0	25.0	0.0	3.	10.	0.0	0.0
MEAN	3.1	0.0	28.7	49.2	37.1	32.0	4.	27.	2.0	0.0
STD. DEV	.1	0.0	11.5	13.9	15.9	7.2	1.	28.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 23 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG.	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 19 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.2	9.1	29.0	44.0	19.0	0.0	3.	15.	.2	6.3
2	4.4	9.3	42.0	72.0	66.0	0.0	3.	10.	.3	7.5
3	4.1	0.0	15.0	25.0	18.0	0.0	3.	80.	.1	1.0
4	4.2	0.0	16.0	0.0	0.0	43.0	3.	65.	.2	3.0
5	4.2	9.3	24.0	44.0	31.0	0.0	3.	40.	.2	5.3
6	4.3	0.0	26.0	49.0	28.0	0.0	3.	50.	.2	2.8
7	4.3	0.0	12.0	11.0	10.0	0.0	2.	40.	.2	0.0
8	4.1	9.0	31.0	59.0	47.0	0.0	3.	20.	.2	4.9
9	4.3	9.3	38.0	57.0	37.0	0.0	3.	20.	.2	6.3
10	4.3	9.1	43.0	75.0	62.0	0.0	4.	25.	.2	5.5
11	4.2	9.3	51.0	71.0	54.0	0.0	4.	25.	.3	9.4
12	4.3	9.0	29.0	65.0	50.0	0.0	3.	15.	.2	2.3
13	4.4	9.1	27.0	28.0	20.0	0.0	5.	80.	.3	6.5
14	4.4	9.1	41.0	42.0	28.0	0.0	3.	30.	.3	5.4
15	4.2	9.1	60.0	46.0	46.0	0.0	4.	40.	.2	5.9
16	4.2	0.0	23.0	21.0	20.0	0.0	3.	60.	.3	2.7
17	4.2	0.0	13.0	40.0	28.0	0.0	3.	10.	.2	3.2
18	4.1	9.1	32.0	59.0	58.0	0.0	3.	20.	.1	5.0
19	4.2	9.3	45.0	71.0	42.0	0.0	4.	45.	.2	10.2
20	4.1	9.1	28.0	47.0	23.0	0.0	3.	25.	.2	4.2

MEAN 4.2 9.1 31.5 49.6 36.8 43.0 3. 35. .2 5.2

STD DEV .1 .1 12.6 18.7 16.6 0.0 1. 22. .1 2.4

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HTGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.4
2	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.3	8.0
3	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	1.5	9.2
4	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.9
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	2.5
6	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	1.4	3.6
7	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.2
8	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.2
9	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.7	5.3
10	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.0
11	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.5	6.5
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	1.6
13	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.5
14	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	3.6
15	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.5	7.0
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	2.5
17	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.6
18	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.3	7.9
19	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	1.0	6.8
20	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.1
MEAN	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.5	4.7
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.4	2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEVER

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.6	9.1	0.0	0.0	0.0	0.0	0.	0.	.3	3.0
2	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.5	7.2
3	4.6	9.1	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
4	4.7	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
5	4.6	9.2	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
6	4.6	9.1	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
7	4.6	9.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
8	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
9	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.5	6.3
10	4.6	9.2	0.0	0.0	0.0	0.0	0.	0.	.5	6.6
11	4.7	9.5	0.0	0.0	0.0	0.0	0.	0.	.3	9.2
12	4.6	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
13	4.6	9.2	0.0	0.0	0.0	0.0	0.	0.	.5	6.8
14	4.6	9.1	0.0	0.0	0.0	0.0	0.	0.	.5	6.2
15	4.5	9.1	0.0	0.0	0.0	0.0	0.	0.	.7	4.5
16	4.5	9.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
17	4.5	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
18	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.4	7.1
19	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.3	6.8
20	4.6	9.2	0.0	0.0	0.0	0.0	0.	0.	.6	5.4

MEAN	4.6	9.3	0.0	0.0	0.0	0.0	0.	0.	.4	5.8
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STD DEV	.3	.2	0.0	0.0	0.0	0.0	0.	0.	.2	1.9
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	4.5	0.0	26.0	36.0	21.0	0.0	3.	20.	2.1	0.0
2	4.6	9.4	38.0	66.0	58.0	0.0	4.	10.	2.2	5.9
3	4.5	0.0	16.0	34.0	23.0	0.0	5.	60.	1.8	0.0
4	4.5	9.2	18.0	44.0	32.0	0.0	5.	45.	1.4	3.6
5	4.4	9.2	34.0	55.0	40.0	0.0	3.	15.	1.6	4.0
6	4.5	9.2	28.0	50.0	25.0	0.0	4.	35.	2.2	3.3
7	4.5	0.0	9.0	27.0	12.0	0.0	5.	25.	1.5	0.0
8	4.6	9.3	28.0	62.0	55.0	0.0	4.	10.	2.1	5.2
9	4.6	9.3	37.0	50.0	43.0	0.0	4.	5.	2.6	4.2
10	4.6	9.4	45.0	77.0	68.0	0.0	4.	5.	1.8	5.0
11	4.6	9.5	54.0	65.0	56.0	0.0	4.	5.	2.0	8.7
12	4.5	9.4	28.0	60.0	42.0	0.0	3.	2.	1.6	3.7
13	4.6	9.3	33.0	74.0	58.0	0.0	5.	90.	3.0	7.0
14	4.6	9.3	41.0	37.0	26.0	0.0	3.	15.	2.1	5.0
15	4.5	9.2	57.0	50.0	40.0	0.0	4.	20.	2.0	7.1
16	4.5	0.0	22.0	32.0	21.0	0.0	5.	30.	1.8	0.0
17	4.5	0.0	14.0	38.0	32.0	0.0	3.	2.	2.1	0.0
18	4.6	9.3	28.0	64.0	55.0	0.0	4.	5.	1.7	7.9
19	4.5	9.4	21.0	36.0	17.0	0.0	5.	30.	2.0	6.7
20	4.5	9.3	28.0	47.0	30.0	0.0	4.	15.	2.1	5.0
MEAN	4.5	9.3	30.3	50.2	37.7	0.0	4.	22.	2.0	5.6
STD DEV	.1	.1	12.6	14.7	16.3	0.0	1.	22.	.4	1.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DENER

DATE 6 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNCH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNCH	NEW SEED STALK LNCH
1	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.9	5.8
2	4.8	9.5	0.0	0.0	0.0	0.0	0.	0.	2.3	7.9
3	4.8	9.4	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
4	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.0	3.8
5	4.9	9.5	0.0	0.0	0.0	0.0	0.	0.	1.1	3.8
6	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.0	0.0
7	4.7	9.6	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
8	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	1.7	4.6
9	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.0	6.6
10	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	1.7	3.2
11	4.9	9.7	0.0	0.0	0.0	0.0	0.	0.	3.2	6.6
12	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.1	2.0
13	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	1.4	4.2
14	4.7	9.6	0.0	0.0	0.0	0.0	0.	0.	2.2	0.3
15	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.1	5.4
16	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	1.8	0.0
17	4.7	9.6	0.0	0.0	0.0	0.0	0.	0.	2.0	0.0
18	4.8	9.4	0.0	0.0	0.0	0.0	0.	0.	1.1	7.8
19	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.2	4.1
20	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	1.3	3.8
MEAN	4.8	9.6	0.0	0.0	0.0	0.0	0.	0.	2.0	5.1
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.6	1.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA DEMER

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	5.0	10.6	0.0	0.0	0.0	0.0	0.	0.	1.2	4.2
2	5.0	10.3	0.0	0.0	0.0	0.0	0.	0.	1.7	7.1
3	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
4	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	4.0
5	5.1	10.2	0.0	0.0	0.0	0.0	0.	0.	1.0	3.7
6	5.0	10.9	0.0	0.0	0.0	0.0	0.	0.	2.5	4.3
7	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.9	0.0
8	5.1	10.6	0.0	0.0	0.0	0.0	0.	0.	2.0	5.0
9	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	6.2
10	5.2	11.1	0.0	0.0	0.0	0.0	0.	0.	2.6	5.2
11	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	2.7	7.0
12	5.1	10.7	0.0	0.0	0.0	0.0	0.	0.	1.9	3.3
13	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	6.8
14	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.0	4.0
15	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.6	6.0
16	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
17	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	2.3	0.0
18	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	3.5
19	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	7.5
20	5.1	10.5	0.0	0.0	0.0	0.0	0.	0.	1.1	3.6
MEAN	5.1	10.6	0.0	0.0	0.0	0.0	0.	0.	1.8	5.1
STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	.5	1.5

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 27 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	3.0	0.0	21.0	54.0	28.0	0.0	4.	15.	0.0	0.0
2	3.1	0.0	11.0	25.0	24.0	0.0	3.	15.	0.0	0.0
3	3.1	0.0	31.0	0.0	0.0	64.0	4.	30.	0.0	0.0
4	2.7	0.0	17.0	30.0	23.0	0.0	4.	25.	0.0	0.0
5	2.4	0.0	33.0	75.0	53.0	0.0	4.	45.	0.0	0.0
6	2.9	0.0	23.0	55.0	43.0	0.0	4.	15.	0.0	0.0
7	3.1	0.0	10.0	35.0	15.0	0.0	4.	10.	0.0	0.0
8	3.0	0.0	28.0	65.0	30.0	0.0	4.	10.	0.0	0.0
9	3.2	0.0	19.0	42.0	23.0	0.0	3.	5.	0.0	0.0
10	3.0	0.0	16.0	43.0	28.0	0.0	4.	45.	0.0	0.0
11	3.1	0.0	28.0	0.0	0.0	45.0	4.	10.	0.0	0.0
12	3.0	0.0	28.0	66.0	45.0	0.0	4.	5.	0.0	0.0
13	2.5	0.0	23.0	50.0	25.0	0.0	4.	10.	0.0	0.0
14	2.0	0.0	29.0	35.0	24.0	0.0	4.	60.	0.0	0.0
15	2.7	0.0	21.0	14.0	17.0	0.0	5.	50.	0.0	0.0
16	3.0	0.0	18.0	26.0	20.0	0.0	4.	10.	0.0	0.0
17	3.1	0.0	23.0	58.0	30.0	0.0	4.	5.	0.0	0.0
18	2.8	0.0	19.0	50.0	38.0	0.0	5.	65.	0.0	0.0
19	2.9	0.0	26.0	44.0	35.0	0.0	5.	55.	0.0	0.0
20	3.1	0.0	17.0	39.0	19.0	0.0	4.	10.	0.0	0.0

MEAN	2.9	0.0	22.1	45.9	29.1	36.3	4.	25.	0.0	0.0
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STD DEV	.3	0.0	6.3	15.6	10.4	32.9	1.	21.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 21 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 3 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 17 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.8	0.0	19.0	52.0	33.0	0.0	4.	3.	0.0	2.5
2	3.8	0.0	12.0	0.0	0.0	28.0	4.	5.	0.0	1.5
3	4.1	0.0	32.0	650.0	550.0	0.0	4.	7.	.1	6.0
4	3.7	0.0	22.0	0.0	0.0	23.0	4.	15.	0.0	3.5
5	3.9	0.0	30.0	0.0	0.0	60.0	5.	70.	0.0	5.0
6	3.2	0.0	30.0	50.0	26.0	0.0	4.	40.	0.0	5.5
7	3.7	0.0	13.0	31.0	17.0	0.0	4.	3.	0.0	3.0
8	3.7	0.0	36.0	61.0	32.0	0.0	4.	10.	0.0	2.0
9	3.2	0.0	20.0	42.0	17.0	0.0	4.	3.	0.0	1.5
10	3.8	0.0	17.0	38.0	19.0	0.0	5.	50.	0.0	1.0
11	3.8	0.0	31.0	68.0	39.0	0.0	4.	5.	0.0	2.0
12	3.8	0.0	32.0	0.0	0.0	51.0	4.	2.	0.0	4.0
13	4.1	0.0	27.0	50.0	21.0	0.0	4.	3.	.1	2.5
14	3.7	0.0	32.0	0.0	0.0	19.0	5.	60.	0.0	0.0
15	3.8	0.0	22.0	0.0	0.0	14.0	4.	30.	0.0	2.5
16	3.9	0.0	19.0	0.0	0.0	20.0	4.	1.	0.0	1.5
17	3.9	0.0	27.0	54.0	30.0	0.0	4.	2.	0.0	4.0
18	3.8	0.0	19.0	50.0	23.0	0.0	5.	45.	0.0	3.0
19	3.8	0.0	23.0	44.0	10.0	0.0	4.	40.	0.0	2.5
20	3.9	0.0	16.0	40.0	17.0	0.0	4.	20.	0.0	2.5

MEAN	3.8	0.0	23.8	94.6	64.2	30.7	4.	21.	.1	2.9
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STD DEV	.1	0.0	7.3	167.2	146.2	17.6	0.	22.	0.0	1.4
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.9	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.8	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.0	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.9	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.9	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 15 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.4
2	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5
3	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	11.1
4	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	10.2
5	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	6.9
6	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	6.6
7	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.1
8	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	10.2
9	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	5.8
10	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1
12	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.1
13	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	8.8
14	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	5.3
15	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	5.1
16	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5
17	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.8
18	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	6.8
19	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	4.0
20	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.6

MEAN	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.2
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.1
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	4.5	9.7	22.0	37.0	32.0	0.0	4.	9.	.2	7.6
2	4.6	9.8	13.0	39.0	28.0	0.0	4.	15.	.2	7.5
3	4.5	9.8	38.0	54.0	47.0	0.0	4.	23.	.1	4.5
4	4.6	9.6	20.5	34.0	28.0	0.0	4.	18.	.1	9.5
5	4.6	9.8	42.0	79.0	55.0	0.0	5.	60.	.2	13.0
6	4.6	9.8	33.0	37.0	33.0	0.0	5.	45.	.1	7.9
7	4.6	9.8	37.0	0.0	0.0	24.0	4.	5.	.1	6.3
8	4.6	9.6	37.0	67.0	41.0	0.0	4.	5.	.1	9.5
9	4.6	9.6	22.0	53.0	18.0	0.0	4.	4.	.1	6.5
10	4.6	0.0	20.0	40.0	35.0	0.0	5.	55.	.1	0.0
11	4.6	9.7	34.0	0.0	0.0	43.0	4.	10.	.1	7.5
12	4.6	9.7	43.0	0.0	0.0	60.0	4.	5.	.2	8.6
13	4.5	9.6	32.0	56.0	21.0	0.0	4.	3.	.1	7.5
14	4.7	9.6	35.0	55.0	41.0	0.0	5.	30.	.2	5.0
15	4.5	9.6	26.0	24.0	17.0	0.0	5.	60.	.1	5.5
16	4.5	9.7	20.0	27.0	26.0	0.0	4.	5.	.1	6.5
17	4.6	9.8	30.0	56.0	45.0	0.0	4.	6.	.1	9.2
18	4.6	9.8	23.0	56.0	35.0	0.0	5.	45.	.1	6.5
19	4.6	9.6	24.0	48.0	26.0	0.0	5.	55.	.2	6.5
20	4.5	9.5	16.0	40.0	19.0	0.0	4.	10.	.1	3.5
MEAN	4.6	9.7	28.4	47.2	32.2	42.3	4.	23.	.1	7.3
STD DEV	.1	.1	8.8	14.3	11.0	18.0	0.	21.	.0	2.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 13 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH	NEW VEG.	NEW SEED
	VEG.	REPR.					CLASS	PERCENT	TWIG LNTH	STALK LNTH

1	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
2	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
3	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
4	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
5	4.7	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
6	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
7	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	6.5
8	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
9	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	4.0
10	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	1.0
11	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
12	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
13	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
14	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
15	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
16	4.5	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
17	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
18	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
19	4.5	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
20	4.7	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	3.5

MEAN 4.5 9.5 0.0 0.0 0.0 0.0 0. 0. .1 6.8

STD DEV .1 .2 0.0 0.0 0.0 0.0 0. 0. .0 2.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 31 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	7.5
2	4.6	10.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
3	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	11.8
4	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
5	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.1
6	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	12.5
7	4.6	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.5
8	4.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
9	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	5.8
10	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	1.2
11	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.3
12	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	10.5
13	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	4.7
14	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.2
15	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	5.7
16	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	7.2
17	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	5.3
18	4.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
19	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.9
20	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.3
MEAN	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	6.3
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.1	3.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA FARSON

DATE 21 SEPTEMBER 1980

PLANT PHENOLOGICAL
NO. STAGE SCORE
VEG. REPR.

PLANT
HEIGHT

PLANT
LENGTH

PLANT
WIDTH

PLANT
DIAM

PLANT
AGE
CLASS

DEAD
BRANCH
PERCENT

NEW
VEG.

TWIG
LENGTH

NEW
SEED

STALK
LENGTH

1	5.4	17.2	0.0	0.0	0.0	0.0	0.	0.	.2	8.0
2	4.5	11.2	0.0	0.0	0.0	0.0	0.	0.	.1	7.2
3	5.5	10.3	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
4	6.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
5	6.4	11.5	0.0	0.0	0.0	0.0	0.	0.	.1	9.5
6	5.5	10.8	0.0	0.0	0.0	0.0	0.	0.	.2	8.0
7	5.3	11.5	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
8	5.5	11.2	0.0	0.0	0.0	0.0	0.	0.	.1	4.8
9	5.4	10.7	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
10	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	.5
11	5.5	10.6	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
12	5.6	10.5	0.0	0.0	0.0	0.0	0.	0.	.1	12.4
13	6.6	10.5	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
14	5.6	11.4	0.0	0.0	0.0	0.0	0.	0.	.1	4.7
15	5.5	10.6	0.0	0.0	0.0	0.0	0.	0.	.1	5.3
16	5.5	10.4	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
17	5.6	10.5	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
18	5.5	10.3	0.0	0.0	0.0	0.0	0.	0.	.2	5.3
19	5.7	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	3.5
20	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.0

MEAN 5.6 10.8 0.0 0.0 0.0 0.0 0. 0. .1 6.2

STD DEV .5 .4 0.0 0.0 0.0 0.0 0. 0. .0 2.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 13 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	2.5	0.0	29.0	90.0	40.0	0.0	5.	80.	0.0	0.0
2	2.5	0.0	29.0	64.0	25.0	0.0	5.	60.	0.0	0.0
3	2.6	0.0	43.0	78.0	46.0	0.0	4.	30.	0.0	0.0
4	2.3	0.0	60.0	80.0	50.0	0.0	4.	40.	0.0	0.0
5	2.4	0.0	17.0	28.0	8.0	0.0	3.	30.	0.0	0.0
6	2.2	0.0	16.0	22.0	14.0	0.0	2.	20.	0.0	0.0
7	2.6	0.0	58.0	76.0	39.0	0.0	4.	20.	0.0	0.0
8	2.5	0.0	18.0	10.0	6.0	0.0	2.	20.	0.0	0.0
9	2.7	0.0	24.0	37.0	10.0	0.0	5.	90.	0.0	0.0
10	2.5	0.0	20.0	16.0	10.0	0.0	3.	80.	0.0	0.0
11	2.4	0.0	26.0	49.0	22.0	0.0	3.	30.	0.0	0.0
12	2.4	0.0	20.0	31.0	15.0	0.0	3.	20.	0.0	0.0
13	2.3	0.0	28.0	23.0	12.0	0.0	2.	20.	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	5.	***	0.0	0.0
15	2.4	0.0	42.0	40.0	27.0	0.0	3.	20.	0.0	0.0
16	2.6	0.0	34.0	36.0	20.0	0.0	4.	60.	0.0	0.0
17	2.3	0.0	50.0	44.0	25.0	0.0	3.	50.	0.0	0.0
18	2.4	0.0	24.0	20.0	7.0	0.0	5.	95.	0.0	0.0
19	2.5	0.0	26.0	90.0	34.0	0.0	5.	80.	0.0	0.0
20	2.4	0.0	10.0	13.0	7.0	0.0	5.	90.	0.0	0.0
MEAN	2.4	0.0	29.8	44.6	21.9	0.0	4.	52.	0.0	0.0
STD DEV	.1	0.0	14.7	27.0	14.1	0.0	1.	30.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	2.8	0.0	61.0	70.0	45.0	0.0	4.	55.	0.0	0.0
2	3.0	0.0	28.0	65.0	46.0	0.0	5.	30.	0.0	0.0
3	2.9	0.0	56.0	88.0	70.0	0.0	5.	20.	0.0	0.0
4	2.8	0.0	65.0	70.0	50.0	0.0	5.	10.	0.0	0.0
5	2.6	0.0	16.0	0.0	0.0	22.0	4.	35.	0.0	0.0
6	2.8	0.0	15.0	24.0	15.0	0.0	4.	40.	0.0	0.0
7	2.8	0.0	62.0	68.0	38.0	0.0	5.	10.	0.0	0.0
8	2.7	0.0	10.0	23.0	8.0	0.0	4.	45.	0.0	0.0
9	3.0	0.0	30.0	62.0	28.0	0.0	4.	85.	0.0	0.0
10	2.7	0.0	22.0	26.0	18.0	0.0	3.	10.	0.0	0.0
11	2.9	0.0	29.0	46.0	25.0	0.0	3.	15.	0.0	0.0
12	2.8	0.0	17.0	0.0	0.0	23.0	5.	30.	0.0	0.0
13	3.0	0.0	29.0	20.0	15.0	0.0	3.	5.	0.0	0.0
14	2.8	0.0	42.0	59.0	43.0	0.0	5.	20.	0.0	0.0
15	3.0	0.0	48.0	38.0	32.0	0.0	3.	10.	0.0	0.0
16	3.1	0.0	38.0	50.0	33.0	0.0	5.	40.	0.0	0.0
17	2.9	0.0	61.0	44.0	38.0	0.0	5.	45.	0.0	0.0
18	3.0	0.0	29.0	0.0	0.0	52.0	4.	90.	0.0	0.0
19	3.1	0.0	27.0	79.0	45.0	0.0	4.	70.	0.0	0.0
20	2.8	0.0	17.0	32.0	21.0	0.0	4.	60.	0.0	0.0
MEAN	2.9	0.0	35.1	50.8	33.5	32.3	4.	36.	0.0	0.0
STD DEV	.1	0.0	17.9	21.3	15.8	17.0	1.	25.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 24 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH. PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN 3.6 0.0 0.0 0.0 0.0 0.0 0. 0. 0.0 0.0

STD DEV .1 0.0 0.0 0.0 0.0 0.0 0. 0. 0.0 0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 6 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
11	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
13	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
20	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
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STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 20 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.1	0.0	50.0	63.0	20.0	0.0	5.	60.	.1	1.0
2	4.2	9.1	33.3	60.0	32.0	0.0	4.	40.	.1	12.5
3	4.2	0.0	45.0	105.0	38.0	0.0	4.	15.	.1	6.0
4	4.1	0.0	65.0	117.0	42.0	0.0	4.	10.	.1	5.5
5	4.1	0.0	18.0	33.0	10.0	0.0	4.	5.	.1	3.5
6	4.3	0.0	15.0	22.0	10.0	0.0	4.	30.	.2	4.0
7	4.1	9.2	50.0	82.0	31.0	0.0	4.	10.	.1	2.5
8	4.2	0.0	10.0	22.0	5.0	0.0	3.	5.	.1	2.0
9	4.2	0.0	32.0	38.0	14.0	0.0	5.	85.	.1	1.5
10	3.9	0.0	21.0	27.0	20.0	0.0	4.	5.	0.0	4.0
11	4.1	0.0	26.0	55.0	15.0	0.0	4.	10.	.1	2.0
12	4.3	0.0	22.0	38.0	14.0	0.0	4.	20.	.2	3.5
13	4.4	0.0	26.0	0.0	0.0	16.0	5.	90.	.3	2.5
14	4.2	0.0	30.0	55.0	29.0	0.0	4.	50.	.1	3.5
15	4.2	0.0	41.0	0.0	0.0	31.0	4.	8.	.2	2.0
16	4.1	0.0	27.0	54.0	25.0	0.0	5.	65.	.1	5.5
17	4.3	0.0	50.0	49.0	15.0	0.0	4.	30.	.3	2.0
18	4.1	0.0	26.0	54.0	20.0	0.0	5.	80.	.1	2.5
19	4.1	9.1	32.0	23.0	24.0	0.0	5.	60.	.1	3.0
20	4.2	0.0	13.0	14.0	11.0	0.0	5.	55.	.2	1.5

MEAN	4.2	6.9	34.1	59.8	20.8	23.5	4.	37.	.1	3.5
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STD DEV	.1	4.6	18.4	26.0	10.3	10.6	1.	29.	.1	2.5
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 3 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 17 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	.2	4.5
2	4.0	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	6.5
3	4.5	9.1	0.0	0.0	0.0	0.0	0.	0.	.3	4.5
4	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.2	6.0
5	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
6	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
7	4.4	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	2.5
8	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
10	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
12	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.5
13	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
14	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.0
15	4.2	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
16	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5
17	4.2	3.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.5
18	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.5
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0

MEAN	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.2	4.2
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.1	1.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 30 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	4.8	0.0	61.0	80.0	60.0	0.0	4.	60.	0.0	0.0
2	4.8	9.7	43.0	76.0	55.0	0.0	4.	40.	0.0	7.0
3	5.0	9.6	60.0	100.0	58.0	0.0	4.	20.	0.0	6.2
4	4.9	9.7	66.0	95.0	70.0	0.0	4.	15.	0.0	4.8
5	4.8	9.6	19.0	29.0	22.0	0.0	3.	10.	0.0	2.7
6	4.9	9.0	18.0	24.0	15.0	0.0	3.	10.	0.0	0.0
7	4.8	9.8	61.0	80.0	56.0	0.0	4.	15.	0.0	3.2
8	4.8	0.0	9.0	26.0	11.0	0.0	3.	20.	0.0	0.0
9	4.9	0.0	31.0	37.0	18.0	0.0	4.	80.	0.0	0.0
10	4.8	9.6	22.0	27.0	27.0	0.0	3.	15.	0.0	5.6
11	4.8	0.0	25.0	56.0	34.0	0.0	5.	15.	0.0	0.0
12	4.9	9.6	19.0	34.0	32.0	0.0	3.	10.	0.0	2.0
13	4.7	0.0	32.0	30.0	17.0	0.0	3.	60.	0.0	0.0
14	4.8	9.7	36.0	55.0	36.0	0.0	4.	45.	0.0	3.9
15	4.8	0.0	38.0	50.0	48.0	0.0	3.	15.	0.0	0.0
16	4.9	9.7	28.0	52.0	50.0	0.0	5.	55.	0.0	6.0
17	4.8	0.0	58.0	45.0	36.0	0.0	4.	30.	0.0	0.0
18	4.8	9.6	26.0	40.0	37.0	0.0	5.	60.	0.0	3.6
19	4.8	9.8	27.0	80.0	54.0	0.0	5.	50.	0.0	5.0
20	4.9	0.0	13.0	30.0	16.0	0.0	4.	40.	0.0	0.0
MEAN	4.8	9.7	34.6	52.3	37.6	0.0	4.	33.	0.0	4.5
STD DEV	.1	.1	17.8	24.5	17.8	0.0	1.	22.	0.0	1.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 29 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	5.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.3	3.0
2	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	.2	9.0
3	5.2	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	3.1
4	5.5	10.2	0.0	0.0	0.0	0.0	0.	0.	.3	5.3
5	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
6	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
7	5.5	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.4
8	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
9	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
10	5.4	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	3.8
11	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
12	5.3	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.6
13	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
14	5.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.2	2.2
15	5.3	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	1.8
16	5.4	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	7.6
17	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
18	5.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.2	3.2
19	5.4	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	6.3
20	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0

MEAN	5.4	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	4.5
STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	.1	2.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA HORSE CK.

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
2	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	1.1	9.5
3	5.6	11.7	0.0	0.0	0.0	0.0	0.	0.	.8	4.6
4	5.6	11.8	0.0	0.0	0.0	0.0	0.	0.	.8	6.0
5	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.7	0.0
6	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
7	5.7	11.9	0.0	0.0	0.0	0.0	0.	0.	.7	3.0
8	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.0	0.0
9	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
10	5.6	11.7	0.0	0.0	0.0	0.0	0.	0.	1.2	4.2
11	5.7	11.6	0.0	0.0	0.0	0.0	0.	0.	.4	1.8
12	5.7	11.7	0.0	0.0	0.0	0.0	0.	0.	.4	6.2
13	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	1.3	0.0
14	5.6	11.5	0.0	0.0	0.0	0.0	0.	0.	.9	6.5
15	5.5	11.2	0.0	0.0	0.0	0.0	0.	0.	1.1	2.0
16	5.7	11.7	0.0	0.0	0.0	0.0	0.	0.	.5	7.0
17	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
18	5.6	10.2	0.0	0.0	0.0	0.0	0.	0.	.7	3.5
19	5.5	11.7	0.0	0.0	0.0	0.0	0.	0.	.6	5.2
20	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0

MEAN	5.6	11.5	0.0	0.0	0.0	0.0	0.	0.	.8	5.0
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STD DEV	.1	.5	0.0	0.0	0.0	0.0	0.	0.	.3	2.2
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REF.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	3.1	0.0	22.0	54.0	24.0	0.0	3.	10.	0.0	0.0
2	3.2	0.1	21.0	43.0	40.0	0.0	4.	20.	0.0	0.0
3	3.4	0.0	29.0	80.0	54.0	0.0	4.	45.	0.0	0.0
4	3.1	0.0	14.0	24.0	14.0	0.0	5.	65.	0.0	0.0
5	3.3	0.0	27.0	83.0	37.0	0.0	4.	15.	0.0	0.0
6	3.4	0.0	22.0	43.0	38.0	0.0	4.	5.	0.0	0.0
7	3.2	0.0	21.0	43.0	36.0	0.0	4.	15.	0.0	0.0
8	3.0	0.0	25.0	15.0	10.0	0.0	5.	60.	0.0	0.0
9	3.2	0.0	22.0	56.0	50.0	0.0	4.	15.	0.0	0.0
10	3.1	0.0	15.0	0.0	0.0	22.0	3.	10.	0.0	0.0
11	3.0	0.0	13.0	20.0	10.0	0.0	4.	20.	0.0	0.0
12	3.3	0.0	27.0	65.0	30.0	0.0	4.	40.	0.0	0.0
13	3.2	0.0	22.0	35.0	28.0	0.0	4.	15.	0.0	0.0
14	3.1	0.0	27.0	72.0	60.0	0.0	4.	55.	0.0	0.0
15	3.0	0.0	13.0	27.0	11.0	0.0	4.	15.	0.0	0.0
16	3.1	0.0	17.0	43.0	20.0	0.0	4.	15.	0.0	0.0
17	3.1	0.0	19.0	70.0	40.0	0.0	4.	35.	0.0	0.0
18	3.3	0.0	17.0	30.0	12.0	0.0	4.	20.	0.0	0.0
19	3.2	0.0	24.0	56.0	40.0	0.0	4.	15.	0.0	0.0
20	3.3	0.0	19.0	35.0	12.0	0.0	4.	65.	0.0	0.0

MEAN	3.2	0.0	20.6	47.6	30.3	22.0	4.	28.	0.0	0.0
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STD DEV	.1	0.0	4.9	20.7	15.8	0.0	0.	20.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 3 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 21 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 3 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HIGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 17 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.0	0.0	29.0	55.0	51.0	0.0	3.	7.	.1	5.6
2	3.9	0.0	26.0	49.0	39.0	0.0	3.	5.	0.0	4.6
3	4.0	0.0	30.0	55.0	54.0	0.0	3.	3.	.1	3.8
4	3.9	0.0	17.0	26.0	15.0	0.0	5.	60.	0.0	4.5
5	3.8	0.0	14.0	30.0	22.0	0.0	2.	3.	0.0	1.8
6	4.0	0.0	37.0	45.0	40.0	0.0	3.	2.	.1	7.5
7	3.9	0.0	23.0	43.0	37.0	0.0	3.	5.	0.0	6.1
8	3.9	0.0	28.0	19.0	12.0	0.0	2.	10.	0.0	5.0
9	3.8	0.0	24.0	50.0	42.0	0.0	3.	5.	0.0	5.5
10	3.8	0.0	25.0	26.0	23.0	0.0	2.	2.	0.0	5.1
11	3.9	0.0	15.0	22.0	12.0	0.0	2.	10.	0.0	3.9
12	4.0	0.0	29.0	65.0	32.0	0.0	3.	15.	.1	4.8
13	3.9	0.0	24.0	42.0	23.0	0.0	3.	25.	0.0	2.3
14	3.8	0.0	22.0	66.0	38.0	0.0	5.	55.	0.0	1.8
15	3.9	0.0	16.0	27.0	15.0	0.0	3.	15.	0.0	6.0
16	3.9	0.0	18.0	35.0	23.0	0.0	3.	10.	0.0	2.9
17	3.7	0.0	17.0	50.0	32.0	0.0	5.	65.	0.0	3.4
18	3.8	0.0	21.0	26.0	22.0	0.0	3.	5.	0.0	4.3
19	3.9	0.0	29.0	59.0	52.0	0.0	3.	10.	0.0	3.1
20	4.0	0.0	20.0	35.0	24.0	0.0	5.	55.	.1	2.9

MEAN	3.9	0.0	23.3	43.4	30.4	0.0	3.	18.	.1	4.3
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STD DEV	.1	0.0	6.0	17.1	13.3	0.0	1.	22.	.0	1.6
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	4.2	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.3	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.1	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.0	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.2	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.2	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.2	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.3	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.3	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.2	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 15 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.0
2	4.2	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	11.5
3	4.0	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	16.0
4	4.1	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
5	4.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.5
6	4.2	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	17.5
7	4.1	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
8	4.3	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	10.0
9	4.2	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
10	4.1	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	15.0
11	4.2	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	10.5
12	4.2	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	13.0
13	4.1	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
14	3.9	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	10.0
15	4.1	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
16	4.2	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	12.0
17	4.1	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
18	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
19	4.0	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	8.5
20	4.1	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	10.5

MEAN	4.1	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	11.3
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STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.0	2.8
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.5	9.7	34.0	54.0	40.0	0.0	4.	5.	.2	13.0
2	4.5	9.7	30.0	0.0	0.0	40.0	4.	10.	.2	11.0
3	4.4	9.8	35.0	74.0	52.0	0.0	4.	8.	.1	13.0
4	4.4	9.6	14.0	25.0	15.0	0.0	5.	50.	.1	10.0
5	4.5	9.7	33.0	56.0	46.0	0.0	4.	2.	.1	13.0
6	4.4	9.8	36.0	0.0	0.0	42.0	4.	2.	.1	16.0
7	4.6	9.8	28.0	0.0	0.0	38.0	4.	5.	.2	13.0
8	4.6	9.9	31.0	66.0	39.0	0.0	4.	4.	.2	14.0
9	4.5	9.9	26.0	0.0	0.0	33.0	4.	3.	.1	14.5
10	4.6	9.9	33.0	0.0	0.0	23.0	4.	5.	.2	12.0
11	4.5	9.6	12.0	19.0	19.0	0.0	3.	10.	.2	6.5
12	4.4	9.7	34.0	68.0	32.0	0.0	4.	15.	.1	15.0
13	4.6	9.4	29.0	45.0	31.0	0.0	4.	10.	.2	8.0
14	4.6	9.7	30.0	74.0	60.0	0.0	4.	35.	.1	13.0
15	4.4	9.6	14.0	49.0	24.0	0.0	4.	8.	.1	8.0
16	4.6	9.7	22.0	45.0	18.0	0.0	4.	10.	.2	11.0
17	4.5	9.5	19.0	46.0	28.0	0.0	4.	40.	.1	8.0
18	4.7	9.8	22.0	34.0	18.0	0.0	4.	5.	.2	12.0
19	4.7	9.7	25.0	0.0	0.0	49.0	4.	10.	.2	10.0
20	4.5	9.7	26.0	31.0	20.0	0.0	4.	15.	.1	12.0

MEAN	4.5	9.7	26.7	49.0	31.6	32.1	4.	13.	.2	11.7
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STD DEV	.1	.1	7.4	17.6	14.2	16.3	0.	13.	.1	2.6
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 12 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
2	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	9.6
3	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	15.2
4	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	10.5
5	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	13.2
6	4.5	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	15.6
7	4.5	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	13.1
8	4.6	10.5	0.0	0.0	0.0	0.0	0.	0.	.2	11.6
9	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	2.5
10	4.5	10.4	0.0	0.0	0.0	0.0	0.	0.	.2	11.5
11	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.5
12	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	17.1
13	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	7.1
14	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	7.1
15	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	10.7
16	4.5	10.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.7
17	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	4.4
18	4.5	10.5	0.0	0.0	0.0	0.0	0.	0.	.1	12.1
19	4.6	10.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
20	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	10.5

MEAN	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.6
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STD DEV	.1	.3	0.0	0.0	0.0	0.0	0.	0.	.0	3.7
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 31 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.7	10.2	0.0	0.0	0.0	0.0	0.	0.	.2	13.2
2	4.5	10.2	0.0	0.0	0.0	0.0	0.	0.	.2	10.5
3	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	7.3
4	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
5	4.5	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	12.5
6	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	14.5
7	4.5	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	15.0
8	4.7	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	9.5
9	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	13.5
10	4.6	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	9.5
11	4.7	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	6.7
12	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	10.5
13	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	8.5
14	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	6.4
15	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	8.7
16	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
17	4.6	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	6.1
18	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.1	11.2
19	4.6	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	9.6
20	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	10.5

MEAN	4.6	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.9
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STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.0	3.1
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA MESA ANT.

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	.1	17.0
2	5.5	11.5	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
3	5.6	11.4	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
4	5.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
5	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	.2	14.5
6	5.8	11.8	0.0	0.0	0.0	0.0	0.	0.	.1	15.5
7	5.5	10.5	0.0	0.0	0.0	0.0	0.	0.	.1	10.5
8	5.5	11.0	0.0	0.0	0.0	0.0	0.	0.	.2	14.5
9	5.6	10.9	0.0	0.0	0.0	0.0	0.	0.	.2	10.5
10	5.7	11.8	0.0	0.0	0.0	0.0	0.	0.	.2	12.0
11	5.5	11.3	0.0	0.0	0.0	0.0	0.	0.	.1	6.5
12	5.5	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	12.5
13	5.7	10.5	0.0	0.0	0.0	0.0	0.	0.	.1	9.0
14	5.6	10.7	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
15	5.6	10.8	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
16	5.6	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	11.5
17	5.7	10.9	0.0	0.0	0.0	0.0	0.	0.	.1	4.0
18	5.6	10.9	0.0	0.0	0.0	0.0	0.	0.	.1	11.8
19	5.4	11.3	0.0	0.0	0.0	0.0	0.	0.	.1	11.5
20	5.6	11.0	0.0	0.0	0.0	0.0	0.	0.	.2	8.0

MEAN 5.6 11.1 0.0 0.0 0.0 0.0 0. 0. .1 10.8

STD DEV .1 .5 0.0 0.0 0.0 0.0 0. 0. .0 3.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 25 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	3.2	0.0	45.0	66.0	53.0	0.0	4.	20.	0.0	0.0
2	2.3	0.0	50.0	55.0	40.0	0.0	4.	40.	0.0	0.0
3	2.4	0.0	25.0	74.0	30.0	0.0	5.	80.	0.0	0.0
4	2.8	0.0	10.0	12.0	7.0	0.0	3.	50.	0.0	0.0
5	2.2	0.0	20.0	13.0	3.0	0.0	5.	95.	0.0	0.0
6	2.3	0.0	27.0	35.0	18.0	0.0	4.	40.	0.0	0.0
7	2.3	0.0	13.0	10.0	4.0	0.0	2.	20.	0.0	0.0
8	2.2	0.0	20.0	32.0	19.0	0.0	3.	30.	0.0	0.0
9	2.6	0.0	50.0	70.0	50.0	0.0	4.	15.	0.0	0.0
10	2.5	0.0	5.0	8.0	4.0	0.0	2.	80.	0.0	0.0
11	2.4	0.0	57.0	80.0	50.0	0.0	4.	50.	0.0	0.0
12	2.3	0.0	60.0	90.0	40.0	0.0	4.	20.	0.0	0.0
13	2.6	0.0	11.0	11.0	4.0	0.0	2.	60.	0.0	0.0
14	2.3	0.0	56.0	90.0	50.0	0.0	4.	15.	0.0	0.0
15	2.3	0.0	14.0	20.0	6.0	0.0	2.	70.	0.0	0.0
16	2.4	0.0	8.0	9.0	5.0	0.0	2.	60.	0.0	0.0
17	2.2	0.0	7.0	6.0	3.0	0.0	2.	40.	0.0	0.0
18	2.4	0.0	10.0	30.0	50.0	0.0	2.	50.	0.0	0.0
19	2.5	0.0	5.0	6.0	4.0	0.0	2.	40.	0.0	0.0
20	2.8	0.0	20.0	36.0	17.0	0.0	5.	80.	0.0	0.0
MEAN	2.5	0.0	25.7	37.7	22.9	0.0	3.	48.	0.0	0.0
STD DEV	.3	0.0	19.5	30.4	20.0	0.0	1.	24.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	3.8	0.0	50.0	0.0	0.0	48.0	5.	10.	0.0	0.0
2	3.5	0.0	45.0	0.0	0.0	50.0	5.	10.	0.0	0.0
3	3.4	0.0	25.0	70.0	20.0	0.0	4.	50.	0.0	0.0
4	3.9	0.0	6.0	0.0	0.0	10.0	4.	40.	0.0	0.0
5	3.2	0.0	19.0	43.0	35.0	0.0	5.	20.	0.0	0.0
6	3.5	0.0	26.0	35.0	16.0	0.0	4.	50.	0.0	0.0
7	3.8	0.0	13.0	0.0	0.0	5.0	3.	25.	0.0	0.0
8	3.5	0.0	20.0	0.0	0.0	22.0	5.	5.	0.0	0.0
9	3.6	0.0	50.0	60.0	44.0	0.0	5.	5.	0.0	0.0
10	3.9	0.0	7.0	0.0	0.0	8.0	3.	10.	0.0	0.0
11	3.5	0.0	60.0	75.0	40.0	0.0	5.	15.	0.0	0.0
12	3.3	0.0	50.0	85.0	44.0	0.0	5.	10.	0.0	0.0
13	3.7	0.0	10.0	0.0	0.0	6.0	4.	40.	0.0	0.0
14	3.4	0.0	52.0	0.0	0.0	50.0	5.	10.	0.0	0.0
15	3.5	0.0	13.0	3.0	0.0	13.0	4.	50.	0.0	0.0
16	3.3	0.0	9.0	15.0	5.0	0.0	4.	30.	0.0	0.0
17	3.5	0.0	7.0	0.0	0.0	4.0	4.	50.	0.0	0.0
18	3.5	0.0	10.0	11.0	4.0	0.0	4.	50.	0.0	0.0
19	3.2	0.0	4.0	0.0	0.0	5.0	4.	20.	0.0	0.0
20	3.5	0.0	30.0	0.0	0.0	24.0	4.	40.	0.0	0.0

MEAN	3.5	0.0	25.9	48.3	27.3	21.3	4.	27.	0.0	0.0
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STD DEV	.2	0.0	19.7	27.9	16.7	20.2	1.	18.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 25 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTENISIA TRIDENTATA

STUDY AREA DNL DRAW

DATE 7 JUNE 1989

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.7	1.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.6	3.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.7	1.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	3.7	0.0	54.0	81.0	52.0	0.0	4.	3.	0.0	11.5
2	3.7	0.0	48.0	59.0	36.0	0.0	4.	5.	0.0	5.5
3	3.8	0.0	22.0	71.0	35.0	0.0	5.	40.	0.0	8.0
4	3.8	0.0	13.5	18.0	10.0	0.0	4.	10.	0.0	5.0
5	3.9	0.0	19.0	40.0	34.0	0.0	4.	15.	0.0	3.5
6	3.6	0.0	25.0	35.0	24.0	0.0	4.	10.	0.0	6.5
7	3.7	0.0	14.0	11.0	4.0	0.0	4.	5.	0.0	4.0
8	3.8	0.0	22.0	25.0	21.0	0.0	4.	3.	0.0	3.0
9	3.9	0.0	47.0	80.0	49.0	0.0	4.	5.	0.0	5.5
10	3.9	0.0	7.5	0.0	0.0	5.0	3.	20.	0.0	4.0
11	4.0	0.0	58.0	73.0	52.0	0.0	4.	30.	.1	7.0
12	3.8	0.0	65.0	89.0	43.0	0.0	4.	3.	0.0	12.5
13	3.6	0.0	15.0	14.0	6.0	0.0	3.	10.	0.0	6.0
14	4.1	0.0	51.0	0.0	0.0	59.0	4.	4.	.1	5.5
15	3.8	0.0	13.5	19.0	10.0	0.0	5.	60.	0.0	3.5
16	3.7	0.0	9.0	18.0	7.0	0.0	3.	5.	0.0	3.5
17	3.7	0.0	10.0	0.0	0.0	5.0	3.	30.	0.0	2.5
18	3.7	0.0	17.0	25.0	6.5	0.0	5.	30.	0.0	5.5
19	3.7	0.0	7.0	11.0	2.5	0.0	4.	10.	0.0	2.0
20	3.7	0.0	33.0	47.0	27.0	0.0	3.	20.	0.0	5.5
MEAN	3.8	0.0	27.5	42.1	24.6	23.0	4.	16.	.1	5.6
STD DEV	.1	0.0	19.0	27.7	17.9	31.2	1.	15.	0.0	2.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG. REPR.	PLANT HEIGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.3	5.3	0.0	0.0	0.0	0.2	0.	0.	1.7	12.8
2	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.4	5.5
3	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	1.1	10.1
4	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	5.7
5	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.2
6	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.5	7.6
7	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.8	5.2
8	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.3	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	0.2
10	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.7
11	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.3
12	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	1.1	11.8
13	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.8
14	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	.3	10.4
15	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
16	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	3.4
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
18	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	5.4
19	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
20	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.4	8.5

MEAN	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.6	6.6
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.5	3.2
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 13 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.5	10.7
2	4.6	9.4	0.0	0.0	0.0	0.0	0.	0.	.4	5.3
3	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.6	9.2
4	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
5	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
6	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.4	8.6
7	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
8	4.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
9	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.3	10.1
10	4.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
11	4.7	9.6	0.0	0.0	0.0	0.0	0.	0.	1.3	6.3
12	4.8	9.5	0.0	0.0	0.0	0.0	0.	0.	1.5	12.6
13	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
14	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.8	10.8
15	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
16	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.4	0.0
17	4.7	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
18	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
19	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
20	4.7	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	8.6
MEAN	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.5	9.1
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.3	2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 29 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.7	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	10.5
2	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	5.6
3	4.7	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	4.7
4	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	12.0
5	4.5	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	8.2
7	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	9.8
10	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
12	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	13.4
13	4.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.7	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	9.4
15	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	9.6
16	4.7	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	5.1
17	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	0.0	12.2
19	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	5.1
20	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	5.8

MEAN	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	9.1
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.4
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 26 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.0
2	4.9	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
3	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
4	4.8	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
5	4.9	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
6	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
7	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
8	4.8	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
9	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	11.0
10	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
11	4.9	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	6.5
12	4.8	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
13	4.9	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
14	4.7	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
15	4.8	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
16	5.1	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	9.6
17	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
18	4.8	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
19	4.9	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.2
20	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
MEAN	4.8	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.1
STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.0	3.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 5 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	5.1	10.4	0.0	0.0	0.0	0.0	0.	0.	0.0	12.0
2	5.2	10.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
3	5.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	5.2	10.9	0.0	0.0	0.0	0.0	0.	0.	0.0	8.0
7	5.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	7.0
10	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	5.0	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	12.5
13	5.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	5.1	11.5	0.0	0.0	0.0	0.0	0.	0.	0.0	6.2
15	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	5.1	10.0	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5

MEAN	5.1	10.4	0.0	0.0	0.0	0.0	0.	0.	0.0	8.3
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STD DEV	.1	.4	0.0	0.0	0.0	0.0	0.	0.	0.0	2.9
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA OWL DRAW

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	5.8	11.1	62.0	81.0	53.0	0.0	4.	15.	.4	13.4
2	5.9	11.7	49.0	77.0	45.0	0.0	5.	40.	.3	7.3
3	6.1	11.0	27.0	65.0	32.0	0.0	5.	70.	.3	9.7
4	6.1	0.0	12.0	20.0	10.0	0.0	3.	30.	.2	0.0
5	6.1	0.0	17.0	0.0	0.0	40.0	4.	20.	.2	0.0
6	6.0	11.8	25.0	34.0	20.0	0.0	4.	35.	.3	7.4
7	5.9	0.0	15.0	12.0	2.5	0.0	2.	15.	.2	0.0
8	6.1	0.0	17.0	34.0	23.0	0.0	4.	30.	.2	0.0
9	6.2	11.1	43.0	84.0	44.0	0.0	4.	20.	.3	10.3
10	6.3	0.0	11.0	12.0	10.0	0.0	2.	15.	.2	0.0
11	6.3	0.0	57.0	91.0	53.0	0.0	4.	35.	.2	0.0
12	6.3	11.4	89.0	105.0	51.0	0.0	4.	15.	.6	11.3
13	6.2	0.0	9.0	12.0	8.0	0.0	2.	20.	.4	0.0
14	6.1	11.6	59.0	88.0	55.0	0.0	4.	20.	.3	11.4
15	6.1	0.0	14.0	25.0	11.0	0.0	3.	60.	.2	0.0
16	6.1	0.0	7.0	12.0	7.0	0.0	2.	20.	.3	0.0
17	6.0	0.0	11.0	5.0	6.0	0.0	2.	10.	.2	0.0
18	6.2	0.0	18.0	34.0	15.0	0.0	3.	20.	.2	0.0
19	6.0	0.0	5.0	12.0	5.0	0.0	2.	30.	.2	0.0
20	6.2	11.3	39.0	63.0	35.0	0.0	5.	50.	.3	8.2
MEAN	6.1	11.4	29.3	45.6	25.6	40.0	3.	29.	.3	9.9
STD DEV	.1	.3	23.3	33.8	19.3	0.0	1.	16.	.1	2.2

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 27 APRIL 1980

PLANT NL.	PHENOLOGICAL STAGE	SCORE VEG. FEPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1	3.2	0.0	40.0	77.0	58.0	0.0	4.	10.	0.0	0.0
2	2.5	0.0	40.0	64.0	50.0	0.0	5.	83.	0.0	0.0
3	3.3	0.0	45.0	130.0	35.0	0.0	4.	5.	0.0	0.0
4	3.3	0.0	32.0	24.0	22.0	0.0	4.	5.	0.0	0.0
5	3.1	0.0	34.0	99.0	77.0	0.0	4.	5.	0.0	0.0
6	3.4	0.0	18.0	40.0	25.0	0.0	3.	5.	0.0	0.0
7	3.1	0.0	32.0	34.0	55.0	0.0	4.	10.	0.0	0.0
8	3.4	0.0	23.0	60.0	20.0	0.0	5.	35.	0.0	0.0
9	3.4	0.0	35.0	154.0	105.0	0.0	4.	15.	0.0	0.0
10	3.2	0.0	34.0	70.0	60.0	0.0	4.	5.	0.0	0.0
11	3.1	0.0	15.0	20.0	15.0	0.0	5.	25.	0.0	0.0
12	3.2	0.0	31.0	105.0	95.0	0.0	4.	5.	0.0	0.0
13	3.2	0.0	10.0	16.0	12.0	0.0	2.	0.	0.0	0.0
14	3.3	0.0	32.0	70.0	65.0	0.0	4.	0.	0.0	0.0
15	3.4	0.0	12.0	20.0	17.0	0.0	5.	25.	0.0	0.0
16	3.2	0.0	10.0	12.0	8.0	0.0	2.	0.	0.0	0.0
17	3.4	0.0	19.0	55.0	40.0	0.0	4.	10.	0.0	0.0
18	3.4	0.0	40.0	165.0	110.0	0.0	4.	10.	0.0	0.0
19	3.1	0.0	22.0	43.0	20.0	0.0	5.	35.	0.0	0.0
20	3.4	0.0	35.0	67.0	46.0	0.0	3.	10.	0.0	0.0
MEAN	3.2	0.0	28.2	68.6	49.2	0.0	4.	17.	0.0	0.0
STD DEV	.2	0.0	10.9	44.0	32.5	0.0	1.	19.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 2 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HTGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 26 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 2 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRICENTRATA

STUDY AREA RED WASH 2

DATE 14 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.0	0.0	43.0	61.0	52.0	0.0	3.	5.	.1	7.3
2	3.7	0.0	46.0	65.0	40.0	0.0	5.	95.	0.0	3.8
3	4.0	0.0	40.0	124.0	112.0	0.0	3.	5.	.1	0.0
4	3.9	0.0	33.0	25.0	22.0	0.0	3.	10.	0.0	2.2
5	3.9	0.0	43.0	100.0	90.0	0.0	3.	5.	0.0	2.2
6	4.0	0.0	25.0	44.0	31.0	0.0	2.	5.	.1	5.4
7	4.0	0.0	37.0	98.0	71.0	0.0	3.	5.	.1	3.1
8	3.9	0.0	34.0	33.0	22.0	0.0	2.	15.	0.0	6.2
9	3.9	0.0	35.0	150.0	110.0	0.0	2.	5.	0.0	4.9
10	3.8	0.0	34.0	74.0	70.0	0.0	3.	5.	0.0	3.8
11	3.9	0.0	15.0	19.0	13.0	0.0	2.	10.	0.0	1.5
12	3.9	0.0	35.0	110.0	98.0	0.0	3.	5.	0.0	4.2
13	3.9	0.0	9.0	17.0	14.0	0.0	2.	2.	0.0	2.3
14	3.9	0.0	35.0	77.0	74.0	0.0	3.	3.	0.0	0.0
15	3.8	0.0	17.0	37.0	30.0	0.0	5.	42.	0.0	2.0
16	3.9	0.0	13.0	14.0	12.0	0.0	2.	2.	0.0	5.2
17	4.0	0.0	20.0	32.0	41.0	0.0	3.	5.	.1	5.1
18	4.0	0.0	53.0	115.0	113.0	0.0	3.	5.	.1	0.0
19	3.4	0.0	22.0	44.0	41.0	0.0	5.	40.	0.0	3.3
20	3.8	0.0	42.0	54.0	48.0	0.0	3.	10.	0.0	0.0

MEAN 3.9 0.0 31.9 55.9 55.7 0.0 3. 14. .1 4.0

STD DEV .1 0.0 12.8 19.3 34.3 0.0 1. 22. .0 1.7

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 30 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.3	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 14 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	13.6
2	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.8
4	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.2
5	4.2	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	6.2
6	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	5.6
7	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	5.7
8	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.8
9	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	11.2
10	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	5.1
11	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
12	4.3	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	15.8
13	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	9.4
15	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.7
17	4.4	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	11.5
18	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	10.0
19	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	5.6
20	4.1	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	7.0

MEAN	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.8
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.1
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 28 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH
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1	4.4	9.8	40.0	60.0	48.0	0.0	4.	5.	.2	9.0
2	4.4	9.3	32.0	0.0	0.0	50.0	5.	95.	.2	4.0
3	4.5	9.9	50.0	120.0	105.0	0.0	4.	10.	.1	13.5
4	4.5	9.6	34.0	23.0	20.0	0.0	4.	5.	.1	11.0
5	4.4	9.8	40.0	0.0	0.0	34.0	4.	5.	.1	13.5
6	4.6	9.7	30.0	0.0	0.0	33.0	4.	1.	.2	7.5
7	4.6	9.5	44.0	0.0	0.0	69.0	4.	2.	.2	17.0
8	4.5	9.0	16.0	32.0	20.0	0.0	4.	40.	.1	4.5
9	4.6	9.8	35.0	68.0	55.0	0.0	4.	10.	.2	13.0
10	4.5	9.4	40.0	70.0	68.0	0.0	4.	2.	.1	11.5
11	4.5	9.1	15.0	23.0	15.0	0.0	4.	40.	.1	7.0
12	4.6	9.8	44.0	107.0	100.0	0.0	4.	1.	.1	11.0
13	4.4	0.0	9.0	17.0	13.0	0.0	3.	5.	.1	3.0
14	4.5	9.8	42.0	0.0	0.0	72.0	4.	5.	.1	12.0
15	4.5	0.0	14.0	50.0	19.0	0.0	5.	65.	.2	3.5
16	4.4	9.8	38.0	75.0	38.0	0.0	4.	3.	.1	11.0
17	4.5	9.8	23.0	0.0	0.0	48.0	4.	6.	.1	13.0
18	4.5	9.7	45.0	168.0	120.0	0.0	4.	1.	.1	11.5
19	4.4	9.6	22.0	65.0	29.0	0.0	5.	50.	.1	5.0
20	4.5	9.5	45.0	58.0	42.0	0.0	4.	10.	.2	6.5

MEAN	4.5	9.6	32.9	66.9	49.4	43.7	4.	18.	.1	9.4
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STD DEV	.1	.3	12.3	41.8	35.9	24.6	0.	26.	.0	4.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 11 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG. REPR.	PLANT HIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	6.9
2	4.5	9.6	0.0	1.0	0.0	0.0	0.	0.	.1	0.0
3	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
4	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	9.3
5	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.2
6	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	13.5
7	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	13.2
8	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
9	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
10	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.2	9.8
11	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	7.4
12	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	13.4
13	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
14	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	17.4
15	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	0.0
16	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	14.0
17	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	15.7
18	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	13.5
19	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	11.3
20	4.5	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	7.6

MEAN	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	11.4
STD DEV	.0	.1	0.0	0.0	0.0	0.0	0.	0.	.0	3.5

0.0 = NOT RECORDED

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ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	17.0
2	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	2.1
3	4.7	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
4	4.6	10.3	0.0	0.0	0.0	0.0	0.	0.	.1	10.2
5	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	10.8
6	4.7	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	12.1
7	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
8	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.0
9	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	10.5
10	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.2	8.4
11	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	.3	10.2
12	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	7.1
13	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	10.2
14	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.2
15	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.2
16	4.7	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	3.6
17	4.5	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	13.2
18	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.1
19	4.6	10.2	0.0	0.0	0.0	0.0	0.	0.	.2	11.0
20	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	6.2

MEAN	4.6	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.2
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STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.1	4.1
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA RED WASH 2

DATE 19 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	5.3	10.5	0.0	0.0	0.0	0.0	0.	0.	.1	10.0
2	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
3	5.5	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	18.0
4	5.4	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	9.5
5	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	13.5
6	5.4	10.2	0.0	0.0	0.0	0.0	0.	0.	.2	8.0
7	5.2	17.3	0.0	0.0	0.0	0.0	0.	0.	.2	10.3
8	5.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.5
9	5.4	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
10	5.4	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	13.5
11	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
12	5.3	10.3	0.0	0.0	0.0	0.0	0.	0.	.1	19.0
13	5.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	1.5
14	5.4	10.2	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
15	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.5
16	5.4	10.3	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
17	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	16.0
18	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
19	5.2	10.3	0.0	0.0	0.0	0.0	0.	0.	.2	7.0
20	5.2	10.1	0.0	0.0	0.0	0.0	0.	0.	.1	7.5

MEAN	5.3	10.6	0.0	0.0	0.0	0.0	0.	0.	.1	10.2
STD DEV	.1	1.7	0.0	0.0	0.0	0.0	0.	0.	.0	5.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 12 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	2.2	0.0	24.0	39.0	0.0	0.0	0.	0.	0.0	0.0
2	2.3	0.0	10.0	43.0	0.0	0.0	0.	0.	0.0	0.0
3	2.2	0.0	8.0	41.0	0.0	0.0	0.	0.	0.0	0.0
4	2.1	0.0	19.0	35.0	0.0	0.0	0.	0.	0.0	0.0
5	2.1	0.0	9.0	34.0	0.0	0.0	0.	0.	0.0	0.0
6	2.3	0.0	32.0	56.0	0.0	0.0	0.	0.	0.0	0.0
7	2.2	0.0	21.0	51.0	0.0	0.0	0.	0.	0.0	0.0
8	2.4	0.0	24.0	49.0	0.0	0.0	0.	0.	0.0	0.0
9	2.4	0.0	15.0	38.0	0.0	0.0	0.	0.	0.0	0.0
10	2.3	0.0	13.0	24.0	0.0	0.0	0.	0.	0.0	0.0
11	2.3	0.0	17.0	79.0	0.0	0.0	0.	0.	0.0	0.0
12	2.3	0.0	14.0	12.0	0.0	0.0	0.	0.	0.0	0.0
13	2.2	0.0	21.0	51.0	0.0	0.0	0.	0.	0.0	0.0
14	2.2	0.0	21.0	29.0	0.0	0.0	0.	0.	0.0	0.0
15	2.2	0.0	19.0	46.0	0.0	0.0	0.	0.	0.0	0.0
16	2.3	0.0	10.0	26.0	0.0	0.0	0.	0.	0.0	0.0
17	2.1	0.0	17.0	47.0	0.0	0.0	0.	0.	0.0	0.0
18	2.2	0.0	23.0	48.0	0.0	0.0	0.	0.	0.0	0.0
19	2.2	0.0	19.0	40.0	0.0	0.0	0.	0.	0.0	0.0
20	2.4	0.0	12.0	41.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	2.2	0.0	17.4	41.5	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	6.1	13.8	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 26 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 2 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	3.4	0.0	15.0	36.0	19.0	0.0	3.	5.	0.0	0.0
2	3.7	0.0	10.0	40.0	25.0	0.0	4.	60.	0.0	0.0
3	3.5	0.0	9.0	40.0	20.0	0.0	5.	4.	0.0	0.0
4	3.6	0.0	18.0	32.0	23.0	0.0	5.	3.	0.0	0.0
5	3.2	0.0	8.0	30.0	25.0	0.0	3.	3.	0.0	0.0
6	3.4	0.0	32.0	52.0	32.0	0.0	5.	12.	0.0	0.0
7	3.2	0.0	20.0	50.0	30.0	0.0	4.	70.	0.0	0.0
8	3.3	0.0	24.0	0.0	0.0	35.0	5.	3.	0.0	0.0
9	3.6	0.0	15.0	0.0	0.0	28.0	5.	8.	0.0	0.0
10	3.7	0.0	12.0	33.0	13.0	0.0	4.	55.	0.0	0.0
11	3.7	0.0	17.0	70.0	43.0	0.0	5.	18.	0.0	0.0
12	3.7	0.0	11.0	40.0	26.0	0.0	5.	8.	0.0	0.0
13	3.2	0.0	18.0	0.0	0.0	42.0	5.	12.	0.0	0.0
14	3.2	0.0	20.0	47.0	29.0	0.0	5.	7.	0.0	0.0
15	3.4	0.0	15.0	40.0	8.0	0.0	4.	50.	0.0	0.0
16	3.3	0.0	10.0	20.0	10.0	0.0	5.	30.	0.0	0.0
17	3.3	0.0	15.0	48.0	30.0	0.0	5.	8.	0.0	0.0
18	3.8	0.0	20.0	42.0	20.0	0.0	5.	15.	0.0	0.0
19	3.6	0.0	18.0	0.0	0.0	38.0	5.	9.	0.0	0.0
20	3.3	0.0	12.0	39.0	23.0	0.0	5.	7.	0.0	0.0
MEAN	3.5	0.0	16.0	41.2	23.5	35.8	5.	19.	0.0	0.0
STD DEV	.2	0.0	5.7	11.2	8.8	5.9	1.	21.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 23 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 5 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.3	9.3	16.0	36.0	20.0	0.0	3.	10.	.2	5.7
2	4.0	0.0	11.0	28.0	12.0	0.0	5.	90.	.1	2.5
3	4.3	9.1	19.0	36.0	15.0	0.0	3.	10.	.2	3.1
4	4.4	9.5	21.0	38.0	22.0	0.0	3.	10.	.3	10.0
5	4.1	9.1	10.0	29.0	22.0	0.0	3.	6.	.1	4.2
6	4.2	9.3	35.0	53.0	33.0	0.0	4.	10.	.2	3.5
7	4.3	0.0	20.0	52.0	23.0	0.0	5.	80.	.2	0.0
8	4.4	9.4	25.0	53.0	31.0	0.0	4.	15.	.3	4.1
9	4.3	9.2	17.0	41.0	28.0	0.0	3.	40.	.2	2.0
10	4.4	9.4	11.0	26.0	13.6	0.0	2.	10.	.3	7.5
11	4.4	5.2	19.0	29.0	21.0	0.0	4.	20.	.3	4.3
12	4.2	9.1	15.0	45.0	25.0	0.0	3.	20.	.2	3.6
13	4.2	9.3	19.0	53.0	29.0	0.0	4.	25.	.2	4.5
14	4.2	9.0	22.0	31.0	19.0	0.0	3.	15.	.2	2.8
15	4.2	9.2	18.0	43.0	8.0	0.0	3.	60.	.2	8.5
16	4.2	9.1	16.0	26.0	12.0	0.0	2.	40.	.2	5.8
17	4.2	9.3	18.0	43.0	25.0	0.0	3.	15.	.1	4.2
18	4.4	9.3	27.0	47.0	20.0	0.0	3.	40.	.2	6.3
19	4.3	9.3	21.0	48.0	23.0	0.0	3.	25.	.2	7.6
20	4.2	9.1	12.0	43.0	23.0	0.0	3.	40.	.1	3.8

MEAN	4.3	9.0	18.6	40.0	21.2	0.0	3.	29.	.2	4.9
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STD DEV	.1	1.0	5.9	9.5	6.6	0.0	1.	24.	.1	2.2
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 1 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	7.1
2	3.8	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	3.2
3	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.7
4	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	7.3
5	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.1
6	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.4	4.2
7	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.4
8	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.3	5.3
9	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.3
10	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.4	8.4
11	3.9	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	3.0
12	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.5
13	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.8
14	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.7
15	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.4	9.7
16	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
17	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	.3	6.3
18	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	.2	6.1
19	4.1	9.0	0.0	0.0	0.0	0.0	0.	0.	.6	5.7
20	3.8	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	4.7

MEAN	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	.3	5.0
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.2	2.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 16 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	6.5
2	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	2.5
3	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.5
4	4.1	9.5	0.0	0.0	0.0	0.0	0.	0.	0.0	10.5
5	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.0
6	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
7	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.5
8	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
9	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	2.5
10	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.5
11	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
12	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
13	4.0	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	4.5
14	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	5.0
15	4.0	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	9.0
16	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
17	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	4.5
18	4.2	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
19	4.2	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
20	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	3.5

MEAN	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	5.6
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.0	2.7
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 30 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	4.4	9.4	23.0	0.0	0.0	33.0	4.	10.	.1	6.0
2	4.2	9.1	10.0	40.0	18.0	0.0	5.	90.	.1	2.5
3	4.2	9.1	11.0	37.0	19.0	0.0	4.	15.	.1	3.5
4	4.4	9.3	20.0	39.0	24.0	0.0	4.	8.	.1	7.5
5	4.3	9.1	9.0	28.0	9.0	0.0	3.	5.	.1	2.5
6	4.5	9.3	29.0	56.0	32.0	0.0	4.	3.	.2	4.0
7	4.4	9.2	18.0	52.0	38.0	0.0	5.	50.	.1	3.0
8	4.2	9.4	20.0	42.0	37.0	0.0	4.	10.	.1	4.0
9	4.1	9.5	15.0	37.0	29.0	0.0	4.	20.	0.0	2.0
10	4.5	9.7	12.0	36.0	13.0	0.0	5.	55.	.1	6.5
11	4.4	9.7	18.0	68.0	43.0	0.0	4.	15.	.1	5.0
12	4.5	9.5	10.0	54.0	28.0	0.0	4.	5.	.1	5.0
13	4.5	9.6	19.0	0.0	0.0	42.0	4.	10.	.1	5.0
14	4.3	9.2	20.0	29.0	22.0	0.0	4.	5.	.1	3.0
15	4.5	9.7	19.0	44.0	7.0	0.0	5.	65.	.1	7.5
16	4.6	9.5	15.0	23.0	13.0	0.0	3.	40.	.2	6.0
17	4.5	9.6	20.0	46.0	30.0	0.0	4.	6.	.1	3.0
18	4.4	9.7	22.0	0.0	0.0	42.0	4.	20.	.1	5.5
19	4.4	9.7	20.0	41.0	26.0	0.0	4.	10.	.1	9.0
20	4.5	9.0	13.0	43.0	23.0	0.0	4.	35.	.1	3.0
MEAN	4.4	9.4	17.2	42.1	24.2	39.0	4.	24.	.1	4.7
STD DEV	.1	.2	5.2	11.1	10.3	5.2	1.	24.	.0	2.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 14 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
2	4.7	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	2.0
3	4.5	9.3	0.0	0.0	0.0	0.0	0.	0.	.1	2.0
4	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
5	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
6	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	3.5
7	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	3.0
8	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	4.5
9	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	2.0
10	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
11	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	3.5
12	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
13	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	6.0
14	4.4	9.0	0.0	0.0	0.0	0.0	0.	0.	.1	4.0
15	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	7.6
16	4.5	9.8	0.0	0.0	0.0	0.0	0.	0.	.1	6.5
17	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
18	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.2	8.2
19	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
20	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	4.0

MEAN	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	5.2
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STD DEV	.1	.2	0.0	0.0	0.0	0.0	0.	0.	.0	2.3
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	4.9	10.2	0.0	0.0	0.0	0.0	0.	0.	.4	6.4
2	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	0.0
3	5.2	10.1	0.0	0.0	0.0	0.0	0.	0.	.4	4.5
4	5.3	10.5	0.0	0.0	0.0	0.0	0.	0.	.5	10.4
5	4.9	10.4	0.0	0.0	0.0	0.0	0.	0.	.2	2.9
6	5.2	10.2	0.0	0.0	0.0	0.0	0.	0.	.8	4.3
7	5.1	10.2	0.0	0.0	0.0	0.0	0.	0.	.4	3.6
8	4.9	10.9	0.0	0.0	0.0	0.0	0.	0.	.3	5.7
9	5.3	10.7	0.0	0.0	0.0	0.0	0.	0.	.4	2.6
10	5.4	10.7	0.0	0.0	0.0	0.0	0.	0.	.5	8.8
11	5.3	10.2	0.0	0.0	0.0	0.0	0.	0.	.4	5.3
12	5.2	10.4	0.0	0.0	0.0	0.0	0.	0.	.7	8.1
13	5.4	10.7	0.0	0.0	0.0	0.0	0.	0.	1.5	5.7
14	5.2	10.1	0.0	0.0	0.0	0.0	0.	0.	.9	2.8
15	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	.2	8.9
16	5.4	10.7	0.0	0.0	0.0	0.0	0.	0.	1.2	7.3
17	5.4	10.2	0.0	0.0	0.0	0.0	0.	0.	1.6	5.1
18	5.4	10.4	0.0	0.0	0.0	0.0	0.	0.	1.7	13.1
19	5.3	10.5	0.0	0.0	0.0	0.0	0.	0.	1.0	9.5
20	5.0	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
MEAN	5.2	10.4	0.0	0.0	0.0	0.0	0.	0.	.7	6.4
STD DEV	.2	.3	0.0	0.0	0.0	0.0	0.	0.	.5	2.9

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SHOSHONI 7

DATE 21 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	5.8	12.9	0.0	0.0	0.0	0.0	0.	0.	.4	7.0
2	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.6	0.0
3	5.7	13.1	0.0	0.0	0.0	0.0	0.	0.	.5	3.7
4	5.7	13.2	0.0	0.0	0.0	0.0	0.	0.	.8	10.8
5	5.8	13.1	0.0	0.0	0.0	0.0	0.	0.	.8	2.9
6	5.8	13.0	0.0	0.0	0.0	0.0	0.	0.	1.1	3.8
7	5.8	12.9	0.0	0.0	0.0	0.0	0.	0.	1.4	5.2
8	5.7	13.1	0.0	0.0	0.0	0.0	0.	0.	1.3	6.9
9	5.7	13.3	0.0	0.0	0.0	0.0	0.	0.	1.2	2.3
10	5.9	13.2	0.0	0.0	0.0	0.0	0.	0.	1.1	9.1
11	5.7	13.1	0.0	0.0	0.0	0.0	0.	0.	.8	4.6
12	5.8	13.0	0.0	0.0	0.0	0.0	0.	0.	1.1	7.6
13	5.7	12.9	0.0	0.0	0.0	0.0	0.	0.	.9	7.2
14	5.9	12.9	0.0	0.0	0.0	0.0	0.	0.	1.0	2.4
15	6.0	13.1	0.0	0.0	0.0	0.0	0.	0.	.8	8.9
16	5.9	12.9	0.0	0.0	0.0	0.0	0.	0.	1.2	7.3
17	5.8	13.0	0.0	0.0	0.0	0.0	0.	0.	.9	4.5
18	5.9	12.9	0.0	0.0	0.0	0.0	0.	0.	1.6	12.1
19	5.7	13.2	0.0	0.0	0.0	0.0	0.	0.	.8	6.6
20	5.9	12.9	0.0	0.0	0.0	0.0	0.	0.	.9	4.5

MEAN	5.8	13.0	0.0	0.0	0.0	0.0	0.	0.	1.0	6.2
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.3	2.8
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 19 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	2.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	2.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	2.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	2.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 22 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	2.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	2.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	2.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

1	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	3.8	0.0	25.0	55.0	31.0	0.0	2.	10.	0.0	7.6
2	3.7	0.0	5.0	7.0	6.0	0.0	5.	85.	0.0	2.1
3	3.8	0.0	27.0	57.0	35.0	0.0	3.	20.	0.0	5.3
4	3.7	0.0	42.0	60.0	50.0	0.0	3.	10.	0.0	5.2
5	3.7	0.0	29.0	57.0	43.0	0.0	3.	5.	0.0	6.6
6	3.8	0.0	16.0	38.0	35.0	0.0	4.	20.	0.0	2.6
7	3.7	0.0	20.0	52.0	40.0	0.0	5.	60.	0.0	2.2
8	3.7	0.0	8.0	23.0	16.0	0.0	2.	2.	0.0	2.9
9	3.9	0.0	23.0	42.0	36.0	0.0	3.	10.	0.0	5.0
10	3.8	0.0	31.0	74.0	55.0	0.0	5.	35.	0.0	3.2
11	3.9	0.0	40.0	109.0	96.0	0.0	4.	10.	0.0	4.1
12	3.7	0.0	18.0	26.0	24.0	0.0	5.	65.	0.0	2.6
13	3.7	0.0	13.0	35.0	23.0	0.0	3.	5.	0.0	5.9
14	3.8	0.0	9.0	32.0	17.0	0.0	5.	70.	0.0	2.2
15	3.9	0.0	38.0	98.0	87.0	0.0	4.	10.	0.0	3.2
16	3.7	0.0	37.0	106.0	82.0	0.0	4.	20.	0.0	3.6
17	3.7	0.0	12.0	85.0	56.0	0.0	2.	3.	0.0	2.3
18	3.9	0.0	28.0	106.0	73.0	0.0	4.	10.	0.0	2.8
19	3.8	0.0	18.0	102.0	58.0	0.0	4.	15.	0.0	6.0
20	3.9	0.0	13.0	24.0	17.0	0.0	5.	60.	0.0	3.2

MEAN	3.8	0.0	22.6	59.4	44.0	0.0	4.	26.	0.0	3.9
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STD DEV	.1	0.0	11.2	32.1	25.4	0.0	1.	26.	0.0	1.7
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HIGHT	PLANT LENGH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGH	NEW SEED STALK LENGH

1	3.8	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.9	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.9	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.9	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.9	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.9	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.8	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 16 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HTGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	4.3	9.4	0.0	0.0	0.0	0.0	0.	0.	0.0	12.4
2	4.3	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.2	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.0
4	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.8
5	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.5
6	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.1
7	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.0
8	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.3
10	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.8
11	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	7.6
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.3
14	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.3
15	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
16	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	3.2
17	4.3	9.3	0.0	0.0	0.0	0.0	0.	0.	0.0	6.6
18	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.1
19	0.0	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.2
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	4.3	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.7
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.1
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA STUDY AREA SWEETWATER

DATE 30 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.6	9.9	17.5	57.0	38.0	0.0	4.	4.	.2	10.7
2	4.5	0.0	12.0	15.0	9.0	0.0	5.	90.	.2	7.0
3	4.5	9.8	12.0	54.0	40.0	0.0	4.	9.	.1	7.5
4	4.5	9.8	53.0	62.0	47.0	0.0	4.	4.	.1	9.5
5	4.5	9.8	18.0	15.0	20.0	0.0	4.	20.	.1	7.6
6	4.5	9.8	19.0	41.0	33.0	0.0	4.	8.	.1	4.8
7	4.5	9.8	24.0	25.0	22.0	0.0	5.	45.	.1	12.5
8	4.5	9.8	8.0	18.0	15.0	0.0	4.	5.	.2	15.5
9	4.5	9.8	23.0	63.0	42.0	0.0	4.	8.	.1	11.1
10	4.5	9.8	31.0	79.0	52.0	0.0	4.	30.	.1	11.0
11	4.6	9.8	44.0	0.0	0.0	90.0	4.	5.	.1	8.1
12	4.5	0.0	18.0	23.0	20.0	0.0	5.	50.	.1	0.0
13	4.5	9.8	20.0	32.0	25.0	0.0	4.	5.	.1	9.7
14	4.5	9.8	13.0	35.0	21.0	0.0	5.	55.	.2	9.1
15	4.5	9.8	42.0	96.0	79.0	0.0	4.	11.	.1	8.0
16	4.5	9.7	37.0	125.0	90.0	0.0	4.	20.	.1	5.9
17	4.6	0.0	11.0	0.0	0.0	53.0	4.	3.	.1	0.0
18	4.5	9.6	39.0	79.0	50.0	0.0	4.	8.	.1	9.2
19	4.6	9.8	35.0	118.0	57.0	0.0	4.	19.	.1	11.5
20	4.5	0.0	15.0	22.0	14.0	0.0	5.	45.	.2	0.0
MEAN	4.5	9.8	24.6	53.3	37.4	71.5	4.	22.	.1	9.3
STD DEV	.0	.1	13.0	34.7	22.4	26.2	0.	23.	.0	2.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 14 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HIGHT	PLANT LNGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNGTH	NEW SEED STALK LNGTH
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1	4.7	10.0	0.0	0.0	0.0	0.0	0.	0.	0.0	11.7
2	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	9.0
3	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	10.2
4	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	10.5
5	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	8.4
6	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	9.2
7	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.9
8	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
9	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
10	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.2
11	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	7.7
12	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.4
14	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	9.8
15	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
16	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	5.7
17	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	0.0	2.9
18	4.6	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
19	4.7	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
20	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1

MEAN	4.7	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	7.7
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	0.0	2.2
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 29 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	4.9	11.6	0.0	0.0	0.0	0.0	0.	0.	.8	11.9
2	4.8	0.0	0.0	0.0	0.0	0.0	0.	0.	.3	0.0
3	5.0	10.8	0.0	0.0	0.0	0.0	0.	0.	2.1	10.2
4	5.2	9.9	0.0	0.0	0.0	0.0	0.	0.	1.3	13.6
5	5.0	10.4	0.0	0.0	0.0	0.0	0.	0.	.7	8.6
6	5.1	9.9	0.0	0.0	0.0	0.0	0.	0.	1.2	8.9
7	4.9	10.0	0.0	0.0	0.0	0.0	0.	0.	1.1	11.1
8	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
9	5.4	10.0	0.0	0.0	0.0	0.0	0.	0.	1.5	16.5
10	5.1	10.0	0.0	0.0	0.0	0.0	0.	0.	1.4	9.8
11	5.0	10.2	0.0	0.0	0.0	0.0	0.	0.	.7	10.8
12	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	1.2	0.0
13	5.3	10.5	0.0	0.0	0.0	0.0	0.	0.	1.1	9.1
14	5.2	10.0	0.0	0.0	0.0	0.0	0.	0.	.9	10.1
15	5.5	9.9	0.0	0.0	0.0	0.0	0.	0.	1.7	13.6
16	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	1.1	0.0
17	5.3	0.0	0.0	0.0	0.0	0.0	0.	0.	.8	0.0
18	5.3	10.0	0.0	0.0	0.0	0.0	0.	0.	.6	8.5
19	5.2	10.0	0.0	0.0	0.0	0.0	0.	0.	1.3	12.6
20	5.3	0.0	0.0	0.0	0.0	0.0	0.	0.	1.5	0.0
MEAN	5.1	10.2	0.0	0.0	0.0	0.0	0.	0.	1.1	11.1
STD DEV	.2	.5	0.0	0.0	0.0	0.0	0.	0.	.4	2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA SWEETWATER

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
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1	5.1	13.5	0.0	0.0	0.0	0.0	0.	0.	2.5	11.7
2	5.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.5	0.0
3	5.3	13.1	0.0	0.0	0.0	0.0	0.	0.	2.3	8.9
4	5.5	13.2	0.0	0.0	0.0	0.0	0.	0.	2.1	12.5
5	5.3	13.4	0.0	0.0	0.0	0.0	0.	0.	1.7	8.2
6	5.5	13.1	0.0	0.0	0.0	0.0	0.	0.	1.1	9.1
7	5.7	13.5	0.0	0.0	0.0	0.0	0.	0.	1.2	11.1
8	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	2.1	0.0
9	5.6	13.5	0.0	0.0	0.0	0.0	0.	0.	1.1	12.2
10	5.7	13.7	0.0	0.0	0.0	0.0	0.	0.	2.4	11.2
11	6.0	13.6	0.0	0.0	0.0	0.0	0.	0.	2.1	11.6
12	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0
13	5.6	13.5	0.0	0.0	0.0	0.0	0.	0.	1.1	8.7
14	5.7	13.6	0.0	0.0	0.0	0.0	0.	0.	1.6	9.4
15	5.6	13.7	0.0	0.0	0.0	0.0	0.	0.	1.1	12.6
16	5.6	12.9	0.0	0.0	0.0	0.0	0.	0.	1.3	4.5
17	5.7	12.9	0.0	0.0	0.0	0.0	0.	0.	1.4	2.9
18	6.0	13.5	0.0	0.0	0.0	0.0	0.	0.	1.6	9.5
19	5.7	12.9	0.0	0.0	0.0	0.0	0.	0.	1.3	12.5
20	5.8	0.0	0.0	0.0	0.0	0.0	0.	0.	.9	0.0

MEAN	5.6	13.4	0.0	0.0	0.0	0.0	0.	0.	1.5	9.8
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STD DEV	.2	.3	0.0	0.0	0.0	0.0	0.	0.	.6	2.8
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 20 APRIL 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	2.3	0.0	26.0	24.0	20.0	0.0	2.	15.	0.0	0.0
2	2.2	0.0	23.0	60.0	35.0	0.0	4.	30.	0.0	0.0
3	2.2	0.0	29.0	48.0	38.0	0.0	3.	10.	0.0	0.0
4	2.1	0.0	29.0	55.0	40.0	0.0	4.	40.	0.0	0.0
5	2.2	0.0	38.0	58.0	36.0	0.0	3.	10.	0.0	0.0
6	2.2	0.0	39.0	0.0	0.0	44.0	3.	5.	0.0	0.0
7	2.1	0.0	16.0	35.0	20.0	0.0	2.	2.	0.0	0.0
8	2.3	0.0	22.0	39.0	20.0	0.0	3.	35.	0.0	0.0
9	2.2	0.0	34.0	63.0	46.0	0.0	3.	5.	0.0	0.0
10	0.0	0.0	30.0	39.0	35.0	0.0	3.	3.	0.0	0.0
11	2.1	0.0	35.0	0.0	0.0	40.0	3.	10.	0.0	0.0
12	2.1	0.0	13.0	18.0	13.0	0.0	3.	20.	2.0	0.0
13	2.1	0.0	38.0	84.0	68.0	0.0	3.	5.	0.0	0.0
14	2.2	0.0	41.0	50.0	30.0	0.0	3.	10.	0.0	0.0
15	2.2	0.0	27.0	34.0	26.0	0.0	3.	5.	0.0	0.0
16	2.2	0.0	37.0	0.0	0.0	64.0	3.	5.	0.0	0.0
17	2.2	0.0	32.0	59.0	35.0	0.0	3.	5.	0.0	0.0
18	2.1	0.0	40.0	96.0	60.0	0.0	3.	10.	0.0	0.0
19	2.1	0.0	23.0	18.0	13.0	0.0	3.	15.	0.0	0.0
20	2.1	0.0	40.0	50.0	44.0	0.0	3.	10.	0.0	0.0
MEAN	2.2	0.0	30.7	48.8	34.1	49.3	3.	13.	2.0	0.0
STD DEV	.1	0.0	6.1	21.1	15.2	12.9	0.	11.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 4 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH
1	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 22 MAY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 4 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG. FEPR.	PLANT HIGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

1	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	4.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
MEAN	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
STD DEV	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 18 JUNE 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCORE REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
1	3.7	0.0	26.0	27.0	25.0	0.0	2.	15.	0.0	4.2
2	3.7	0.0	25.0	63.0	24.0	0.0	4.	40.	0.0	3.0
3	3.8	0.0	28.0	52.0	40.0	0.0	4.	30.	0.0	2.7
4	3.8	0.0	26.0	25.0	26.0	0.0	5.	70.	0.0	6.8
5	4.0	0.0	35.0	69.0	41.0	0.0	4.	15.	.1	4.4
6	3.9	0.0	35.0	50.0	47.0	0.0	4.	10.	0.0	4.8
7	3.8	0.0	20.0	37.0	27.0	0.0	3.	10.	0.0	5.7
8	4.1	0.0	24.0	23.0	16.0	0.0	3.	40.	.1	4.2
9	4.0	0.0	35.0	69.0	43.0	0.0	4.	30.	.1	10.1
10	4.1	9.2	29.0	54.0	33.0	0.0	4.	10.	.1	13.6
11	4.2	9.1	43.0	51.0	40.0	0.0	4.	15.	.2	7.3
12	4.2	0.0	19.0	23.0	14.0	0.0	3.	20.	0.0	5.2
13	3.9	9.1	38.0	88.0	62.0	0.0	4.	15.	0.0	6.1
14	4.1	9.1	42.0	49.0	35.0	0.0	3.	10.	.1	10.5
15	3.8	0.0	23.0	41.0	37.0	0.0	3.	15.	0.0	4.5
16	4.3	9.3	41.0	74.0	72.0	0.0	4.	15.	.3	9.6
17	4.1	0.0	32.0	64.0	49.0	0.0	3.	15.	.1	5.1
18	4.1	0.0	38.0	102.0	49.0	0.0	4.	10.	.1	6.2
19	4.1	9.0	23.0	28.0	19.0	0.0	3.	15.	.1	6.1
20	4.0	0.0	38.0	69.0	58.0	0.0	4.	10.	.1	5.1
MEAN	4.0	9.1	31.0	52.9	37.9	0.0	4.	21.	.1	6.3
STD DEV	.2	.1	7.6	22.2	15.5	0.0	1.	15.	.1	2.8

358

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 2 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE	SCOPE VEG.	REPR.	PLANT HGT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	4.1	9.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	3.9	9.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7	4.1	9.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
8	3.9	9.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
9	3.9	9.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
10	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
11	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
13	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	4.0	9.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 16 JULY 1980

PLANT NO.	PHENOLOGICAL STAGE VEG.	SCOPE REPR.	PLANT HEIGHT	PLANT LENGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LENGTH	NEW SEED STALK LENGTH

1	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
2	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
3	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	3.0
4	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
5	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	7.5
6	3.9	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.0
7	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	8.5
8	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
9	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	6.5
10	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	12.0
11	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
12	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	5.0
13	4.2	9.1	0.0	0.0	0.0	0.0	0.	0.	.1	6.5
14	4.2	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	9.5
15	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	4.0
16	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	8.0
17	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	8.5
18	4.1	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	9.0
19	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
20	3.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	4.5
MEAN	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	7.2
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.0	2.1

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 1 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	4.4	9.1	24.0	0.0	0.0	22.0	4.	10.	.2	6.0
2	4.3	9.2	25.0	57.0	24.0	0.0	4.	25.	.1	8.0
3	4.3	0.0	25.0	52.0	32.0	0.0	4.	8.	.1	3.5
4	4.3	9.1	18.0	44.0	13.0	0.0	4.	25.	.1	8.0
5	4.4	9.2	27.0	64.0	36.0	0.0	4.	13.	.1	7.0
6	4.3	9.3	36.0	49.0	40.0	0.0	4.	5.	.1	8.5
7	4.4	9.2	18.0	34.0	23.0	0.0	4.	3.	.2	8.0
8	4.3	9.3	22.0	0.0	0.0	17.0	3.	40.	.1	5.5
9	4.4	9.2	34.0	0.0	0.0	50.0	4.	10.	.1	11.5
10	4.4	9.2	34.0	42.0	36.0	0.0	4.	5.	.1	7.0
11	4.4	9.3	35.0	0.0	0.0	43.0	4.	10.	.1	8.0
12	4.4	9.2	15.0	22.0	16.0	0.0	3.	15.	.2	5.5
13	4.3	9.5	35.0	86.0	59.0	0.0	4.	8.	.1	10.0
14	4.3	9.6	40.0	0.0	0.0	37.0	4.	10.	.1	14.0
15	4.4	9.1	19.0	0.0	0.0	31.0	3.	7.	.1	4.0
16	4.4	9.3	26.0	56.0	37.0	0.0	4.	10.	.1	9.0
17	4.3	9.3	30.0	54.0	38.0	0.0	4.	8.	.1	8.5
18	4.3	9.1	35.0	65.0	54.0	0.0	4.	10.	.1	8.5
19	4.2	9.2	25.0	22.0	9.0	0.0	3.	35.	.1	5.5
20	4.3	0.0	38.0	58.0	39.0	0.0	4.	5.	.1	4.0

MEAN	4.3	9.2	28.1	51.1	33.3	33.3	4.	13.	.1	7.5
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STD DEV	.1	.1	7.5	17.6	16.0	12.5	0.	10.	.0	2.6
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0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 14 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
1	4.6	9.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.2
2	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	18.0
3	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	2.3
4	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	6.5
5	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	7.1
6	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
7	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.2	8.0
8	4.5	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	5.6
9	4.5	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	9.5
10	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	11.2
11	4.6	0.0	0.0	0.0	0.0	0.0	0.	0.	.2	5.6
12	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.2	5.3
13	4.4	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	6.1
14	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	13.5
15	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	3.9
16	4.6	9.7	0.0	0.0	0.0	0.0	0.	0.	.1	9.9
17	4.6	9.5	0.0	0.0	0.0	0.0	0.	0.	.2	7.6
18	4.5	9.5	0.0	0.0	0.0	0.0	0.	0.	.1	7.0
19	4.5	9.4	0.0	0.0	0.0	0.0	0.	0.	.1	10.5
20	4.5	0.0	0.0	0.0	0.0	0.0	0.	0.	.1	5.5
MEAN	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	7.6
STD DEV	.1	.1	0.0	0.0	0.0	0.0	0.	0.	.1	3.6

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA STUDY AREA UPPER GOV.

DATE 30 AUGUST 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE	PLANT HT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH
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1	5.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	5.2	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
3	5.4	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	11.6
4	5.3	9.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
5	5.3	10.4	0.0	0.0	0.0	0.0	0.	0.	0.0	11.6
6	5.4	10.2	0.0	0.0	0.0	0.0	0.	0.	0.0	7.8
7	5.4	10.0	0.0	0.0	0.0	0.0	0.	0.	0.0	7.2
8	5.3	11.5	0.0	0.0	0.0	0.0	0.	0.	0.0	11.5
9	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	0.0	11.6
10	5.2	10.2	0.0	0.0	0.0	0.0	0.	0.	0.0	15.8
11	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
12	5.3	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	6.7
13	5.2	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.2
14	5.3	10.0	0.0	0.0	0.0	0.0	0.	0.	0.0	9.8
15	5.4	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	5.3	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	9.2
17	5.4	10.2	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1
18	5.3	10.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.6
19	5.3	10.1	0.0	0.0	0.0	0.0	0.	0.	0.0	10.5
20	5.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN 5.3 10.2 0.0 0.0 0.0 0.0 0. 0. 0.0 9.9

STD DEV .1 .4 0.0 0.0 0.0 0.0 0. 0. 0.0 2.3

0.0 = NOT RECORDED

ARTEMISIA TRIDENTATA

STUDY AREA UPPER GOV.

DATE 20 SEPTEMBER 1980

PLANT NO.	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
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1	5.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	5.6	13.1	0.0	0.0	0.0	0.0	0.	0.	0.0	6.2
3	5.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	5.8	16.9	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5
5	5.7	16.4	0.0	0.0	0.0	0.0	0.	0.	0.0	7.6
6	5.8	12.8	0.0	0.0	0.0	0.0	0.	0.	0.0	5.7
7	5.9	13.2	0.0	0.0	0.0	0.0	0.	0.	0.0	6.4
8	6.0	13.9	0.0	0.0	0.0	0.0	0.	0.	0.0	5.5
9	5.8	16.1	0.0	0.0	0.0	0.0	0.	0.	0.0	11.2
10	6.0	16.2	0.0	0.0	0.0	0.0	0.	0.	0.0	10.2
11	5.7	16.1	0.0	0.0	0.0	0.0	0.	0.	0.0	6.0
12	6.1	16.3	0.0	0.0	0.0	0.0	0.	0.	0.0	5.7
13	5.8	16.2	0.0	0.0	0.0	0.0	0.	0.	0.0	5.9
14	6.0	15.1	0.0	0.0	0.0	0.0	0.	0.	0.0	11.3
15	6.0	16.2	0.0	0.0	0.0	0.0	0.	0.	0.0	3.6
16	5.8	14.1	0.0	0.0	0.0	0.0	0.	0.	0.0	10.1
17	5.9	15.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.4
18	5.8	16.6	0.0	0.0	0.0	0.0	0.	0.	0.0	8.1
19	5.8	16.5	0.0	0.0	0.0	0.0	0.	0.	0.0	9.5
20	6.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0

MEAN	5.8	15.3	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5
STD DEV	.1	1.4	0.0	0.0	0.0	0.0	0.	0.	0.0	2.2

0.0 = NOT RECORDED

TABLE V. Average phenological development for 1980 for the prime species for the sampling dates.

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<u>Agropyron smithii</u>	
Bud Kimball Exclosure	366
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Demer Exclosure	389
Farson Exclosure	390
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Mesa Antelope Exclosure	392
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Red Wash # 2 Exclosure	394
Shoshoni # 7 Exclosure	395
Sweetwater Exclosure	396
Upper Government Draw Exclosure	397

AGROPYRON SMITHII

STUDY AREA BUD KIMBAL

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NOS.	NOS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

13	APRIL	1980	1.9	0.0	.1	2.9	0.0	0.0	1.5
27	APRIL	1980	3.5	0.0	.1	7.8	0.0	0.0	1.1
3	MAY	1980	4.3	0.0	.2	11.8	0.0	0.0	1.8
4	JUNE	1980	4.3	0.0	.3	14.7	****	0.0	0.0
19	JUNE	1980	5.4	0.0	.1	19.4	0.0	0.0	1.3
2	JULY	1980	4.7	0.0	.3	18.5	0.0	0.0	1.2
14	JULY	1980	5.0	0.0	.3	18.1	0.0	0.0	2.1
29	JULY	1980	6.9	0.0	.3	8.9	0.0	0.0	1.3
25	AUGUST	1980	6.8	0.0	.1	12.5	0.0	0.0	1.7
6	SEPTEMBER	1980	7.9	0.0	.3	11.3	0.0	0.0	1.8
21	SEPTEMBER	1980	7.5	0.0	.2	9.2	0.0	0.0	1.7

AGROPYRON SMITHII

STUDY AREA CUMBERLAND

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NOS.	NOS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

20	MAY	1980	4.7	0.0	.2	14.7	0.0	0.0	2.0
11	JUNE	1980	5.2	0.0	.2	19.2	0.0	0.0	3.1
17	JUNE	1980	5.5	0.0	.2	20.6	0.0	0.0	1.8
1	JULY	1980	5.7	11.0	.3	26.5	54.4	1.0	3.0
15	JULY	1980	5.9	0.0	.2	22.7	0.0	0.0	3.8
4	AUGUST	1980	5.3	0.0	.2	20.5	0.0	0.0	2.3
12	AUGUST	1980	5.3	0.0	.2	25.2	0.0	0.0	1.4
31	AUGUST	1980	5.4	0.0	.2	23.1	0.0	0.0	1.9
20	SEPTEMBER	1980	6.4	0.0	.2	20.8	0.0	0.0	2.1

AGROPYRON SMITHII

STUDY AREA DEMER

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NOS.	NOS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

12	APRIL	1980	1.9	0.0	.2	10.3	0.0	0.0	1.4
27	APRIL	1980	4.3	0.0	.3	16.0	0.0	0.0	1.6
31	APRIL	1980	4.5	0.0	.2	15.2	0.0	0.0	2.5
23	MAY	1980	5.3	0.0	.3	18.8	0.0	0.0	1.4
4	JUNE	1980	4.7	0.0	.3	17.4	0.0	0.0	0.0
19	JUNE	1980	5.4	0.0	.2	17.0	0.0	0.0	3.1
2	JULY	1980	5.0	0.0	.2	15.4	0.0	0.0	1.5
14	JULY	1980	6.2	0.0	.2	17.0	0.0	0.0	1.4
29	JULY	1980	6.5	16.4	.3	20.8	35.0	4.0	2.1
21	AUGUST	1980	6.9	0.0	.2	17.2	0.0	0.0	2.4
6	SEPTEMBER	1980	6.8	0.0	.3	14.7	0.0	0.0	1.4
20	SEPTEMBER	1980	6.9	0.0	.3	16.0	0.0	0.0	2.0

AGROPYRON SMITHII

STUDY AREA FARSON

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NOS.	NOS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

27	APRIL	1980	1.1	0.0	0.0	0.0	0.0	0.0	1.9
3	MAY	1980	3.2	0.0	.1	7.4	0.0	0.0	2.1
21	MAY	1980	4.3	0.0	.1	9.2	0.0	0.0	1.3
3	JUNE	1980	4.5	0.0	.2	16.7	0.0	0.0	1.7
17	JUNE	1980	5.4	0.0	.1	14.2	0.0	0.0	2.5
1	JULY	1980	5.7	0.0	.2	14.6	0.0	0.0	2.5
15	JULY	1980	5.9	0.0	.2	19.5	0.0	0.0	1.9
29	JULY	1980	6.1	0.0	.1	18.8	0.0	0.0	2.2
13	AUGUST	1980	6.4	0.0	.1	13.6	0.0	0.0	2.7
31	AUGUST	1980	6.4	0.0	.1	16.3	0.0	0.0	1.8
21	SEPTEMBER	1980	6.6	0.0	.1	14.6	0.0	0.0	2.0

AGROPYRON SMITHII

STUDY AREA HORSE CK.

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NDS.	NDS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

13	APRIL	1980	3.4	0.0	.2	5.4	0.0	0.0	2.0
26	APRIL	1980	3.3	0.0	.2	9.8	0.0	0.0	1.2
4	MAY	1980	4.0	0.0	.2	11.2	0.0	0.0	1.7
24	MAY	1980	4.4	0.0	.2	14.6	0.0	0.0	1.3
6	JUNE	1980	5.2	0.0	.2	13.9	0.0	0.0	1.6

AGROPYRON SMITHII

STUDY AREA MESA ANT

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NOS.	NOS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

26	APRIL	1980	2.2	0.0	.1	4.2	0.0	0.0	1.0
3	MAY	1980	3.6	0.0	.1	7.0	0.0	0.0	2.1
21	MAY	1980	4.1	0.0	.2	12.3	0.0	0.0	2.8
3	JUNE	1980	4.3	0.0	1.6	13.2	0.0	0.0	1.4
17	JUNE	1980	4.7	0.0	.2	11.8	0.0	0.0	4.1
1	JULY	1980	5.2	0.0	.2	14.6	0.0	0.0	1.7
15	JULY	1980	5.6	0.0	.2	15.0	0.0	0.0	2.0
29	JULY	1980	6.3	0.0	.1	19.0	0.0	0.0	1.5
12	AUGUST	1980	6.5	0.0	.1	13.8	0.0	0.0	1.9
31	AUGUST	1980	6.7	0.0	.1	17.6	0.0	0.0	1.6
21	SEPTEMBER	1980	6.9	0.0	.1	13.9	0.0	0.0	1.4

AGROPYRON SMITHII

STUDY AREA OWL DRAW

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NDS.	NDS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

25	APRIL	1980	3.9	0.0	.2	7.6	0.0	0.0	1.5
4	MAY	1980	4.3	0.0	.2	10.4	0.0	0.0	1.5
25	MAY	1980	5.1	0.0	.2	11.1	0.0	0.0	2.3
2	JUNE	1980	4.5	0.0	.2	11.7	0.0	0.0	1.3
18	JUNE	1980	4.9	0.0	.2	12.4	0.0	0.0	1.7
30	JUNE	1980	4.7	0.0	.2	14.3	0.0	0.0	1.3
13	JULY	1980	5.8	0.0	.2	10.6	0.0	0.0	1.4
28	JULY	1980	6.3	0.0	.3	15.8	0.0	0.0	1.3
26	AUGUST	1980	6.6	16.9	.2	15.1	19.3	0.0	2.2
5	SEPTEMBER	1980	6.8	0.0	.3	15.4	0.0	0.0	2.2
21	SEPTEMBER	1980	7.1	0.0	.2	17.2	0.0	0.0	1.6

AGROPYRON SMITHII

STUDY AREA RED WASH

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NDS.	NDS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

27	APRIL	1980	3.0	0.0	.1	5.3	0.0	0.0	2.4
2	MAY	1980	3.7	0.0	.1	8.4	0.0	0.0	1.6
26	MAY	1980	4.6	0.0	.2	15.2	0.0	0.0	1.5
2	JUNE	1980	4.7	0.0	.2	15.1	0.0	0.0	1.9
16	JUNE	1980	5.4	0.0	.2	17.7	0.0	0.0	1.7
30	JUNE	1980	5.7	0.0	.2	15.8	0.0	0.0	2.3
14	JULY	1980	5.9	0.0	.3	16.6	0.0	0.0	2.5
28	JULY	1980	6.1	16.1	.2	19.1	44.1	7.5	4.0
11	AUGUST	1980	6.3	0.0	.2	15.3	0.0	0.0	2.0
30	AUGUST	1980	6.4	0.0	.1	17.6	0.0	0.0	1.9
19	SEPTEMBER	1980	6.7	0.0	.2	14.6	0.0	0.0	2.3

AGROPYRON SMITHII

STUDY AREA SHOSHONI 7

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NOS.	NOS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

12	APRIL	1980	2.6	0.0	.2	8.3	0.0	0.0	1.0
26	APRIL	1980	4.2	0.0	.3	10.0	0.0	0.0	1.1
2	MAY	1980	4.3	0.0	.3	12.3	0.0	0.0	2.0
23	MAY	1980	4.8	0.0	.2	17.0	0.0	0.0	1.2
5	JUNE	1980	5.3	0.0	.3	16.5	0.0	0.0	1.3
18	JUNE	1980	5.6	0.0	.2	15.8	0.0	0.0	1.1
1	JULY	1980	4.9	0.0	.3	15.4	0.0	0.0	1.3
16	JULY	1980	5.3	0.0	.2	18.7	0.0	0.0	1.3
30	JULY	1980	6.2	15.8	.2	17.5	55.5	6.0	1.5
14	AUGUST	1980	5.5	0.0	.2	18.3	0.0	0.0	1.5
30	AUGUST	1980	6.9	0.0	.1	13.6	0.0	0.0	1.2
21	SEPTEMBER	1980	7.0	0.0	.2	18.2	0.0	0.0	1.1

AGROPYRON SMITHII

STUDY AREA SWEETWATER

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NDS.	NDS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

19	APRIL	1980	2.7	0.0	.1	5.2	0.0	0.0	1.0
4	MAY	1980	4.4	0.0	.2	5.9	0.0	0.0	1.0
22	MAY	1980	4.5	0.0	.2	15.6	0.0	0.0	1.3
4	JUNE	1980	5.0	0.0	.2	15.9	0.0	0.0	2.8
18	JUNE	1980	5.2	0.0	.2	19.2	0.0	0.0	1.3
2	JULY	1980	5.7	0.0	.2	18.7	0.0	0.0	2.0
16	JULY	1980	5.9	0.0	.1	17.2	0.0	0.0	2.3
30	JULY	1980	6.3	16.3	.1	18.0	41.5	8.0	1.8
14	AUGUST	1980	6.5	0.0	.1	15.0	0.0	0.0	1.7
29	AUGUST	1980	6.7	16.5	.1	16.1	19.2	0.0	2.5
20	SEPTEMBER	1980	7.0	0.0	.2	21.0	0.0	0.0	1.6

AGROPYRON SMITHII

STUDY AREA UPPER GJV.

DATE			PHENOLOGICAL		MAX.	MAX.	MAX.	NOS.	NOS.
			STAGE	SCORE	LEAF	LEAF	SPIKE	SPK/	VEG.
			VEG.	REPR.	WIDTH	HGHT.	HGHT.	CULM	PLANT

20	APRIL	1980	3.6	0.0	.2	6.6	0.0	0.0	1.8
4	MAY	1980	4.4	0.0	.2	11.1	0.0	0.0	1.3
22	MAY	1980	4.6	0.0	.2	14.5	0.0	0.0	1.4
4	JUNE	1980	4.7	0.0	.3	18.8	0.0	0.0	1.6
18	JUNE	1980	5.6	0.0	.2	15.9	0.0	0.0	2.4
2	JULY	1980	5.9	0.0	.2	18.1	0.0	0.0	1.4
16	JULY	1980	5.8	0.0	.2	20.5	0.0	0.0	2.5
1	AUGUST	1980	6.3	0.0	.2	18.7	0.0	0.0	1.4
14	AUGUST	1980	6.7	0.0	.2	20.8	0.0	0.0	1.2
30	AUGUST	1980	6.8	15.5	.2	22.2	26.0	0.0	1.8
20	SEPTEMBER	1980	5.9	0.0	.2	19.7	0.0	0.0	1.8

AGROPYRON SPICATUM

STUDY AREA CEDAR MTN.

DATE			PHENOLOGICAL		CLUMP			MAX.	MAX.	MAX.	NO.	NO.	NO.
			STAGE	SCORE	LGTH.	WIDTH	DIAM.	LEAF	LEAF	SPK	SPL/	REPR	VEG
			VEG.	REPR.				WIDTH	HGHT	HGHT	CULM	CULM	CULM

26	APRIL	1980	3.7	0.0	22.8	13.1	2.0	.1	6.7	0.0	0.	0.	29.
2	MAY	1980	4.6	0.0	0.0	0.0	0.0	.2	8.9	0.0	0.	0.	0.
19	MAY	1980	5.1	0.0	23.3	12.0	0.0	.3	15.6	0.0	0.	0.	0.
2	JUNE	1980	5.6	0.0	0.0	0.0	0.0	.2	19.0	0.0	0.	0.	0.
16	JUNE	1980	5.8	9.9	22.6	12.9	14.0	.2	21.4	22.6	4.	5.	63.
30	JUNE	1980	5.9	11.2	0.0	0.0	0.0	.2	21.5	35.0	0.	0.	0.
14	JULY	1980	5.9	11.5	0.0	0.0	0.0	.3	20.4	34.8	0.	0.	0.
28	JULY	1980	5.9	15.8	24.2	13.5	0.0	.2	20.7	36.0	6.	5.	65.
11	AUGUST	1980	6.2	16.0	0.0	0.0	0.0	.2	20.5	35.4	0.	0.	0.
30	AUGUST	1980	6.3	16.5	0.0	0.0	0.0	.2	19.7	5.8	6.	0.	0.
20	SEPTEMBER	1980	6.5	16.0	0.0	0.0	0.0	.2	19.7	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPHYRON SPICATUM

STUDY AREA CUMBER. 3

DATE			PHENOLOGICAL		CLUMP			MAX.	MAX.	MAX.	NO.	NO.	NO.
			STAGE	SCORE	LGTH.	WIDTH	DIAM.	LEAF	LEAF	SPK	SPL/	REPR	VEG
			VEG.	REPR.				WIDTH	HGHT	HGHT	CULM	CULM	CULM

20	MAY	1980	4.6	0.0	15.2	7.4	0.0	.2	19.2	0.0	0.	0.	37.
11	JUNE	1980	5.7	0.0	0.0	0.0	0.0	.3	30.2	0.0	0.	0.	0.
17	JUNE	1980	5.7	0.0	14.3	8.4	9.0	.2	30.1	0.0	0.	0.	44.
1	JULY	1980	5.9	10.0	0.0	0.0	0.0	.3	31.8	49.6	0.	0.	0.
15	JULY	1980	5.9	12.0	0.0	0.0	0.0	.3	33.2	49.2	0.	0.	0.
4	AUGUST	1980	6.2	16.0	13.0	8.0	0.0	.2	31.1	46.0	6.	1.	41.
12	AUGUST	1980	6.4	16.0	0.0	0.0	0.0	.2	32.1	49.0	0.	0.	0.
31	AUGUST	1980	6.5	16.0	0.0	0.0	0.0	.2	26.7	6.5	6.	0.	0.
20	SEPTEMBER	1980	6.5	0.0	0.0	0.0	0.0	.2	29.0	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA DEMER

DATE			PHENOLOGICAL		CLUMP			MAX.	MAX.	MAX.	NO.	NO.	NO.
			STAGE	SCORE	LGTH.	WIDTH	DIAM.	LEAF	LEAF	SPK	SPL/	REPR	VEG
			VEG.	REPR.				WIDTH	HGHT	HGHT	CULM	CULM	CULM

4	APRIL	1980	4.1	0.0	27.2	16.2	0.0	.3	7.7	0.0	0.	0.	0.
27	APRIL	1980	4.5	0.0	0.0	0.0	0.0	.3	20.3	0.0	0.	0.	0.
3	MAY	1980	5.0	0.0	38.8	26.8	15.0	.3	19.4	0.0	0.	0.	81.
23	MAY	1980	5.7	10.0	0.0	0.0	0.0	.3	29.0	30.1	0.	16.	1.
4	JUNE	1980	5.6	10.0	0.0	0.0	0.0	.3	23.2	42.4	0.	0.	0.
19	JUNE	1980	5.9	10.0	28.2	19.3	0.0	.3	31.4	54.5	11.	35.	231.
2	JULY	1980	5.8	13.0	0.0	0.0	0.0	.3	22.3	40.1	9.	0.	0.
14	JULY	1980	6.0	16.0	0.0	0.0	0.0	.2	27.6	51.2	10.	0.	0.
28	JULY	1980	6.3	15.5	32.0	22.2	0.0	.3	23.8	40.1	5.	40.	137.
21	AUGUST	1980	6.6	16.0	0.0	0.0	0.0	.3	28.7	42.8	5.	0.	0.
6	SEPTEMBER	1980	6.8	16.0	0.0	0.0	0.0	.3	20.5	40.6	0.	0.	0.
20	SEPTEMBER	1980	7.1	0.0	0.0	0.0	0.0	.3	4.5	0.0	0.	0.	0.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA HORSE CK.

DATE			PHENOLOGICAL		CLUMP			MAX.	MAX.	MAX.	NO.	NO.	NO.
			STAGE	SCORE	LGTH.	WIDTH	DIAM.	LEAF	LEAF	SPK	SPL/	REPR	VEG
			VEG.	REPR.				WIDTH	HGHT	HGHT	CULM	CULM	CULM

13	APRIL	1980	4.1	0.0	14.6	8.5	0.0	.2	8.7	0.0	0.	0.	0.
26	APRIL	1980	4.5	0.0	0.0	0.0	0.0	.2	12.6	0.0	0.	0.	0.
3	MAY	1980	4.5	0.0	15.8	8.0	9.1	.3	15.5	0.0	0.	0.	0.
24	MAY	1980	5.1	0.0	0.0	0.0	0.0	.2	14.8	0.0	0.	0.	0.
6	JUNE	1980	5.7	0.0	20.2	15.8	0.0	.2	19.6	0.0	0.	0.	129.

0.0 = NOT RECORDED

AGROPYRON SPICATUM

STUDY AREA OWL DRAW

DATE			PHENOLOGICAL		CLUMP			MAX.	MAX.	MAX.	NO.	NO.	NO.
			STAGE	SCORE	LGTH.	WIDTH	DIAM.	LEAF	LEAF	SPK	SPL/	REPR	VEG
			VEG.	REPR.				WIDTH	HGHT	HGHT	CULM	CULM	CULM

25	APRIL	1980	4.4	0.0	10.7	5.4	0.0	.2	5.2	0.0	0.	0.	14.
4	MAY	1980	4.7	0.0	7.5	4.5	4.3	.2	7.4	0.0	0.	0.	11.
25	MAY	1980	5.1	0.0	0.0	0.0	0.0	.2	13.1	0.0	0.	0.	0.
2	JUNE	1980	5.4	9.0	0.0	0.0	0.0	.3	14.7	0.0	0.	0.	0.
18	JUNE	1980	5.1	10.0	6.3	3.2	3.9	.3	13.2	8.0	6.	7.	12.
30	JUNE	1980	5.3	12.0	0.0	0.0	0.0	.3	12.5	29.0	7.	0.	0.
13	JULY	1980	5.5	13.5	0.0	0.0	0.0	.2	13.0	26.7	9.	0.	0.
28	JULY	1980	6.4	15.4	0.0	0.0	0.0	.3	16.0	25.8	6.	0.	0.
26	AUGUST	1980	6.6	16.0	0.0	0.0	0.0	.2	13.1	26.8	0.	0.	0.
5	SEPTEMBER	1980	6.9	16.0	0.0	0.0	0.0	.3	10.5	28.7	0.	0.	0.
21	SEPTEMBER	1980	6.9	16.0	9.8	6.4	0.0	.2	14.1	26.4	7.	6.	11.

0.0 = NOT RECORDED

AGROPYRON SPICATUM STUDY AREA RED WASH

DATE			PHENOLOGICAL		CLUMP			MAX.	MAX.	MAX.	NO.	NO.	NO.
			STAGE	SCORE	LGTH.	WIDTH	DIAM.	LEAF	LEAF	SPK	SPL/	REPR	VEG
			VEG.	REPR.				WIDTH	HGHT	HGHT	CULM	CULM	CULM

25	APRIL	1980	3.4	0.0	38.9	21.8	79.0	.2	4.3	0.0	0.	0.	4.
2	MAY	1980	4.4	0.0	43.8	27.1	0.0	.2	6.9	0.0	0.	0.	0.
26	MAY	1980	4.6	0.0	0.0	0.0	0.0	.2	22.7	0.0	0.	0.	0.
2	JUNE	1980	5.2	0.0	0.0	0.0	0.0	.3	25.3	0.0	0.	0.	0.
16	JUNE	1980	5.8	9.7	41.3	25.6	0.0	.3	30.2	29.5	5.	109.	280.
30	JUNE	1980	5.9	11.2	0.0	0.0	0.0	.3	27.8	45.0	0.	0.	0.
14	JULY	1980	5.9	14.2	0.0	0.0	0.0	.3	26.7	48.0	0.	0.	0.
28	JULY	1980	5.9	15.7	48.1	28.0	0.0	.3	28.5	48.0	6.	25.	393.
11	AUGUST	1980	6.2	16.0	0.0	0.0	0.0	.3	27.7	47.2	0.	0.	0.
30	AUGUST	1980	6.4	15.6	0.0	0.0	0.0	.2	36.0	8.9	7.	0.	0.
19	SEPTEMBER	1980	6.5	16.0	0.0	0.0	0.0	.2	27.9	0.0	0.	0.	0.

0.0 = NOT RECORDED

ARTEMISIA NOVA

STUDY AREA HORSE CK.

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNPTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNPTH	NEW SEED STALK LNPTH	

13	APRIL	1980	2.4	0.0	23.6	43.7	25.9	0.0	2.	51.	0.0	0.0
26	APRIL	1980	2.9	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	MAY	1980	2.8	0.0	24.9	55.0	36.1	23.3	4.	26.	0.0	0.0
24	MAY	1980	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
6	JUNE	1980	3.7	0.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
20	JUNE	198	3.9	0.0	29.3	47.3	32.1	0.0	4.	19.	.1	10.7
3	JULY	1980	4.1	0.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	JULY	1980	4.1	0.6	0.0	0.0	0.0	0.0	0.	0.	.1	10.9
30	JULY	1980	4.7	0.6	31.8	52.8	37.1	0.0	4.	18.	0.0	11.4
29	AUGUST	1980	5.4	0.9	0.0	0.0	0.0	0.0	0.	0.	.2	13.3
20	SEPTEMBER	1980	5.7	11.6	0.0	0.0	0.0	0.0	0.	0.	0.0	11.8

ARTEMISIA NOVA

STUDY AREA OWL DRAW

DATE	PHENOLOGICAL STAGE	SCORE VEG.	SCORE PEPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

25	APRIL	1980	2.4	0.0	10.8	24.2	14.5	0.0	4.	42.	0.0 - 0.0
4	MAY	1980	3.5	0.0	8.7	38.3	14.8	15.3	4.	31.	0.0 0.0
25	MAY	1980	3.7	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	JUNE	1980	3.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	JUNE	1980	3.8	0.0	13.9	28.6	20.4	0.0	4.	29.	0.0 5.5
30	JUNE	1980	3.9	0.2	0.0	0.0	0.0	0.	0.	.1	6.9
13	JULY	1980	4.5	0.6	0.0	0.0	0.0	0.	0.	.2	8.9
28	JULY	1980	4.5	0.6	0.0	0.0	0.0	0.	0.	0.0	7.8
26	AUGUST	1980	4.9	0.8	0.0	0.0	0.0	0.	0.	.2	6.0
5	SEPTEMBER	1980	5.1	10.2	0.0	0.0	0.0	0.	0.	0.0	7.9
21	SEPTEMBER	1980	6.1	11.2	13.7	25.4	17.1	0.0	4.	35.	.2 9.4

ARTEMISIA NOVA

STUDY AREA SWEETWATER

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	

19	APRIL	1980	3.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
22	MAY	1980	2.8	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
4	JUNE	1980	4.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
18	JUNE	1980	3.8	0.0	10.9	37.9	23.2	62.8	4.	25.	0.0	5.0
2	JULY	1980	4.0	9.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	JULY	1980	4.2	9.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.1
30	JULY	1980	4.4	9.7	13.1	39.5	19.7	35.1	4.	26.	.1	9.1
14	AUGUST	1980	4.6	9.8	0.0	0.0	0.0	0.0	0.	0.	0.0	8.7
29	AUGUST	1980	4.9	10.2	0.0	0.0	0.0	0.0	0.	0.	.4	10.5
20	SEPTEMBER	1980	5.8	13.7	0.0	0.0	0.0	0.0	0.	0.	1.0	9.5

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ARTEMISIA TRIDENTATA STUDY AREA BUD KIMBAL

DATE	PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

13 APRIL 1980	2.2 1.0	23.2	38.5	21.5	0.0	3.	39.	0.0	0.0
27 APRIL 1980	2.9 1.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3 MAY 1980	3.1 0.0	23.8	42.1	29.7	15.4	4.	27.	0.0	0.0
4 JUNE 1980	3.0 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19 JUNE 1980	4.1 0.1	23.4	41.1	24.1	0.0	3.	35.	.2	4.0
2 JULY 1980	4.0 0.0	0.0	0.0	0.0	0.0	0.	0.	.2	3.2
13 JULY 1980	4.6 0.6	0.0	0.0	0.0	0.0	0.	0.	.3	4.1
29 JULY 1980	4.6 0.4	24.6	37.9	30.1	0.0	3.	17.	1.4	4.2
6 SEPTEMBER 1980	5.1 0.8	0.0	0.0	0.0	0.0	0.	0.	1.2	4.5
21 SEPTEMBER 1980	5.5 10.7	0.0	0.0	0.0	0.0	0.	0.	1.2	4.2

ARTEMISIA TRIDENTATA STUDY AREA CEDAR MTN

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	

26	APRIL	1980	3.2	0.0	26.1	52.8	35.9	30.0	3.	14.	0.0	0.0
2	MAY	1980	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	MAY	1980	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	JUNE	1980	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	JUNE	1980	4.1	0.0	35.6	56.6	35.3	41.5	4.	8.	.1	9.6
30	JUNE	1980	4.2	0.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	JULY	1980	4.3	0.8	0.0	0.0	0.0	0.0	0.	0.	.2	15.6
28	JULY	1980	4.6	0.8	42.6	60.7	41.2	44.2	4.	9.	.2	16.0
3	AUGUST	1980	4.6	0.7	54.9	87.2	44.3	52.0	4.	25.	.1	12.0
11	AUGUST	1980	4.6	0.9	0.0	0.0	0.0	0.0	0.	0.	.2	15.1
30	AUGUST	1980	4.6	0.9	0.0	0.0	0.0	0.0	0.	0.	.2	15.2
20	SEPTEMBER	1980	5.6	11.1	0.0	0.0	0.0	0.0	0.	0.	.2	15.8

ARTEMISIA TRIDENTATA STUDY AREA CUMBER. 3

DATE	PHENOLOGICAL STAGE	SCORE VEG. REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

20 MAY 1980	3.7	0.0	49.9	57.3	35.5	37.0	4.	29.	0.0	0.0
11 JUNE 1980	4.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17 JUNE 1980	4.0	0.0	54.6	59.8	40.6	0.0	3.	10.	.1	6.2
1 JULY 1980	4.2	0.4	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15 JULY 1980	4.4	0.3	0.0	0.0	0.0	0.0	0.	0.	0.0	10.6
12 AUGUST 1980	4.7	0.7	0.0	0.0	0.0	0.0	0.	0.	.1	11.7
31 AUGUST 1980	4.6	0.9	0.0	0.0	0.0	0.0	0.	0.	.2	13.0
20 SEPTEMBER 1980	5.7	10.9	0.0	0.0	0.0	0.0	0.	0.	.1	11.8

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ARTEMISIA TRIDENTATA STUDY AREA DEMER

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

12	APRIL	1980	2.2 1.0	27.4	41.1	29.0	0.0	3.	42.	0.0	0.0
27	APRIL	1980	2.9 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	MAY	1980	3.1 0.0	28.7	49.2	37.1	32.0	4.	27.	2.0	0.0
23	MAY	1980	3.6 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	JUNE	1980	3.8 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
19	JUNE	1980	4.2 0.1	31.5	49.6	36.8	43.0	3.	36.	.2	5.2
2	JULY	1980	4.1 0.0	0.0	0.0	0.0	0.0	0.	0.	.5	4.7
14	JULY	1980	4.6 0.3	0.0	0.0	0.0	0.0	0.	0.	.4	5.8
29	JULY	1980	4.5 0.3	30.3	50.2	37.7	0.0	4.	22.	2.0	5.6
6	SEPTEMBER	1980	4.2 0.6	0.0	0.0	0.0	0.0	0.	0.	2.0	5.1
20	SEPTEMBER	1980	5.1 10.6	0.0	0.0	0.0	0.0	0.	0.	1.8	5.1

ARTEMISIA TRIDENTATA STUDY AREA FARSON

	DATE	PHENOLOGICAL STAGE	SCORE VEG.	REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

27	APRIL	1980	2.9	0.0	22.1	45.9	29.1	36.3	4.	25.	0.0	0.0
3	MAY	1980	3.3	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
21	MAY	1980	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	JUNE	1980	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	JUNE	1980	3.8	0.0	23.8	94.6	64.2	30.7	4.	21.	.1	2.9
1	JULY	1980	3.9	0.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	JULY	1980	4.1	0.1	0.0	0.0	0.0	0.0	0.	0.	0.0	7.3
29	JULY	1980	4.6	0.7	28.4	47.2	32.2	42.3	4.	23.	.1	7.3
13	AUGUST	1980	4.6	0.6	0.0	0.0	0.0	0.0	0.	0.	.1	6.8
31	AUGUST	1980	4.6	0.9	0.0	0.0	0.0	0.0	0.	0.	.2	6.3
21	SEPTEMBER	1980	5.6	10.8	0.0	0.0	0.0	0.0	0.	0.	.1	6.2

ARTEMISIA TRIDENTATA STUDY AREA HORSE CK.

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	

13	APRIL	1980	2.4 0.0	29.8	44.6	21.9	0.0	4.	52.	0.0	0.0	
26	APRIL	1980	2.9 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
3	MAY	1980	2.9 0.0	35.1	50.8	23.5	32.3	4.	36.	0.0	0.0	
24	MAY	1980	3.6 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
6	JUNE	1980	3.7 0.0	0.0	0.0	0.0	0.0	0.	0.	.1	0.0	
20	JUNE	1980	4.2 5.9	34.1	50.8	20.8	23.5	4.	37.	.1	3.5	
3	JULY	1980	4.0 0.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0	
17	JULY	1980	4.1 0.1	0.0	0.0	0.0	0.0	0.	0.	.2	4.2	
30	JULY	1980	4.8 0.7	34.6	52.3	37.6	0.0	4.	33.	0.0	4.5	
29	AUGUST	1980	3.4 0.0	0.0	0.0	0.0	0.0	0.	0.	.2	4.5	
21	SEPTEMBER	1980	5.6 11.5	0.0	0.0	0.0	0.0	0.	0.	.8	5.0	

ARTEMISIA TRIDENTATA STUDY AREA MESA ANT.

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH	

26	APRIL	1980	3.2	0.0	20.8	47.8	30.3	22.0	4.	28.	0.0	0.0
3	MAY	1980	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
21	MAY	1980	3.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
3	JUNE	1980	4.1	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
17	JUNE	1980	3.9	0.0	23.3	43.4	30.4	0.0	3.	18.	.1	4.3
1	JULY	1980	4.2	0.5	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
15	JULY	1980	4.1	0.7	0.0	0.0	0.0	0.0	0.	0.	.1	11.3
29	JULY	1980	4.5	0.7	26.7	49.0	31.6	32.1	4.	13.	.2	11.7
12	AUGUST	1980	4.5	0.9	0.0	0.0	0.0	0.0	0.	0.	.1	10.6
31	AUGUST	1980	4.6	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.9
21	SEPTEMBER	1980	5.6	11.1	0.0	0.0	0.0	0.0	0.	0.	.1	10.8

ARTEMISIA TRIDENTATA STUDY AREA OWL DRAW

DATE	PHENOLOGICAL STAGE	SCORE	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH
	VEG.	REPR.					CLASS			

25 APRIL 1980	2.5	0.0	25.7	37.7	22.9	0.0	3.	48.	0.0	0.0
4 MAY 1980	3.5	0.0	25.9	48.8	27.3	21.3	4.	27.	0.0	0.0
25 MAY 1980	3.7	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
7 JUNE 1980	3.6	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18 JUNE 1980	3.8	0.0	27.5	42.1	24.6	23.0	4.	16.	.1	5.6
30 JUNE 1980	4.1	0.2	0.0	0.0	0.0	0.0	0.	0.	.6	6.6
13 JULY 1980	4.6	0.6	0.0	0.0	0.0	0.0	0.	0.	.5	9.1
28 JULY 1980	4.6	0.6	0.0	0.0	0.0	0.0	0.	0.	0.0	9.1
26 AUGUST 1980	4.8	0.8	0.0	0.0	0.0	0.0	0.	0.	.1	7.1
5 SEPTEMBER 1980	5.1	10.4	0.0	0.0	0.0	0.0	0.	0.	0.0	8.3
21 SEPTEMBER 1980	6.1	11.4	29.3	45.6	25.6	40.0	3.	29.	.3	9.9

ARTEMISIA TRIDENTATA STUDY AREA RED WASH 2

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH	

27	APRIL	1980	3.2	1.0	28.2	66.6	49.2	0.0	4.	17.	0.0	0.0
2	MAY	1980	3.4	1.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
26	MAY	1980	3.4	1.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	JUNE	1980	2.9	1.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	JUNE	1980	3.9	1.0	31.9	65.9	55.7	0.0	3.	14.	.1	4.0
30	JUNE	1980	4.2	1.1	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
14	JULY	1980	4.2	1.3	0.0	0.0	0.0	0.0	0.	0.	0.0	8.8
28	JULY	1980	4.5	1.6	32.9	66.9	49.4	43.7	4.	18.	.1	9.4
11	AUGUST	1980	4.6	1.8	0.0	0.0	0.0	0.0	0.	0.	.1	11.4
30	AUGUST	1980	4.6	10.0	0.0	0.0	0.0	0.0	0.	0.	.2	9.2
19	SEPTEMBER	1980	5.3	10.6	0.0	0.0	0.0	0.0	0.	0.	.1	10.2

ARTEMISIA TRIDENTATA STUDY AREA SHOSHONI 7

	DATE		PHENOLOGICAL STAGE SCORE VEG. REPR.	PLANT HGHT	PLANT LGTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LGTH	NEW SEED STALK LGTH

12	APRIL	1980	2.2 0.0	17.4	41.5	0.0	0.0	0.	0.	0.0	0.0
26	APRIL	1980	3.1 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
2	MAY	1980	3.5 0.0	16.0	41.2	23.5	35.8	5.	19.	0.0	0.0
23	MAY	1980	3.7 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
5	JUNE	1980	4.2 0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	JUNE	1980	4.3 9.0	18.6	40.0	21.2	0.0	3.	29.	.2	4.9
1	JULY	1980	4.0 9.1	0.0	0.0	0.0	0.0	0.	0.	.3	5.0
16	JULY	1980	4.1 9.2	0.0	0.0	0.0	0.0	0.	0.	.1	5.6
30	JULY	1980	4.4 9.4	17.2	42.1	24.2	39.0	4.	24.	.1	4.7
14	AUGUST	1980	4.6 9.7	0.0	0.0	0.0	0.0	0.	0.	.1	5.2
30	AUGUST	1980	5.2 10.4	0.0	0.0	0.0	0.0	0.	0.	.7	6.4
21	SEPTEMBER	1980	5.8 13.0	0.0	0.0	0.0	0.0	0.	0.	1.0	6.2

ARTEMISIA TRIDENTATA STUDY AREA SWEETWATER

	DATE		PHENOLOGICAL STAGE	SCORE VEG.	REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

19	APRIL	1980	2.4	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
22	MAY	1980	3.1	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	JUNE	1980	3.8	0.0		0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	JUNE	1980	3.8	0.0		22.6	59.4	44.0	0.0	4.	26.	0.0	3.9
2	JULY	1980	4.0	9.1		0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	JULY	1980	4.3	9.2		0.0	0.0	0.0	0.0	0.	0.	0.0	8.7
30	JULY	1980	4.5	9.8		24.6	53.3	37.4	71.5	4.	22.	.1	9.3
14	AUGUST	1980	4.7	9.8		0.0	0.0	0.0	0.0	0.	0.	0.0	7.7
29	AUGUST	1980	5.1	10.2		0.0	0.0	0.0	0.0	0.	0.	1.1	11.1
20	SEPTEMBER	1980	5.6	13.4		0.0	0.0	0.0	0.0	0.	0.	1.5	9.8

ARTEMISIA TRIDENTATA STUDY AREA UPPER GOV.

	DATE	PHENOLOGICAL STAGE	SCORE VEG.	SCORE REPR.	PLANT HGT	PLANT LNTH	PLANT WIDTH	PLANT DIAM	PLANT AGE CLASS	DEAD BRANCH PERCENT	NEW VEG. TWIG LNTH	NEW SEED STALK LNTH

20	APRIL	1980	2.2	0.0	30.7	48.8	34.1	49.3	3.	13.	2.0	0.0
4	MAY	1980	3.5	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
22	MAY	1980	3.0	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
4	JUNE	1980	4.2	0.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
18	JUNE	1980	4.0	9.1	31.0	52.9	37.9	0.0	4.	21.	.1	6.3
2	JULY	1980	4.0	9.0	0.0	0.0	0.0	0.0	0.	0.	0.0	0.0
16	JULY	1980	4.1	9.2	0.0	0.0	0.0	0.0	0.	0.	.1	7.2
1	AUGUST	1980	4.3	9.2	28.1	51.1	33.3	33.3	4.	13.	.1	7.5
14	AUGUST	1980	4.6	9.6	0.0	0.0	0.0	0.0	0.	0.	.1	7.6
30	AUGUST	1980	5.3	10.2	0.0	0.0	0.0	0.0	0.	0.	0.0	9.9
20	SEPTEMBER	1980	5.8	15.3	0.0	0.0	0.0	0.0	0.	0.	0.0	7.5

TABLE VI. Phenological development dates for all species for three major growth stages - growth initiation, full bloom, seed dissemination - by exclosure for the years 1973 through 1980.

	<u>Page</u>
Bud Kimball Exclosure	400
Cedar Mountain Exclosure	406
Cumberland # 3 Exclosure	409
Demer Exclosure	415
Farson Exclosure	418
Horse Creek Exclosure	421
Mesa Antelope Exclosure	427
Owl Draw Exclosure	430
Red Wash # 2 Exclosure	436
Shoshoni # 7 Exclosure	439
Sweetwater Exclosure	442
Upper Government Draw Exclosure	448

TABLE VI. (Continued):

STUDY AREA BUD KIMBALL								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGCR	----	----	----	----	----	----	----	----
AGGL	----	----	----	----	----	----	----	----
AGSM	----	Mar	Mar	Mar	23 Apr	Apr	Apr	10 Apr
AGSP	----	----	----	----	----	Apr	Apr	Apr
ALTE	----	----	----	----	----	May	Apr	Apr
ANDI	----	----	----	----	----	----	----	----
ANOC	----	----	----	----	----	----	----	May
ARHO ²	----	----	----	----	----	Apr	Apr	----
ARTR	----	20 May	May	May	23 Apr	Apr	Apr	8 Apr
ASPU	----	----	----	----	----	----	Apr	----
BOGR	----	----	----	----	----	Jun	Apr	1 Apr
BRJA	----	----	----	----	----	----	Apr	----
BRTE	----	----	----	Mar	23 Apr	----	Apr	Mar
CACH	----	----	----	----	23 Apr	----	----	Apr
CANU	----	----	----	----	----	----	Apr	Apr
CAAN	----	25 Apr	----	Apr	----	----	Apr	----
CHDE	----	----	----	----	----	----	Apr	----
CRE	----	----	----	----	23 Apr	----	----	----
CRMO	----	----	----	----	----	Apr	Apr	Apr
CYMO	----	----	----	----	----	----	----	----
DEPI	----	----	----	----	----	May	Apr	Apr
ERPU	----	----	----	Apr	Apr	25 May	Apr	Apr
GIPU	----	----	----	----	----	----	----	May
HAGL	----	----	----	----	----	----	----	May
KOCR	----	Mar	Mar	Mar	Apr	----	Apr	Mar
LARE	----	----	----	Mar	Apr	25 May	Apr	Apr
LEDE	----	----	----	----	----	25 May	May	Apr
LERE	----	25 Apr	----	Apr	17 May	25 May	Apr	Apr
LES	----	----	----	----	----	----	----	----
LOOR	----	----	----	----	23 Apr	Apr	----	Apr
MACA	----	----	----	----	----	----	----	----
MAGL	----	----	----	----	----	----	----	10 Apr
MAGR	----	5 May	----	May	----	----	----	----
MATA	----	----	----	----	May	23 Apr	----	Apr
OPPO	----	----	----	Apr	23 Apr	25 May	Apr	30 Apr
ORHY	----	----	----	----	----	----	----	----
PHHO	----	----	----	Mar	23 Apr	25 May	Apr	Apr
PLPA	----	----	----	----	May	Jun	----	Apr
PLSA	----	----	----	----	----	----	----	----
PLSP	----	----	----	----	May	----	----	----
POSE	----	Mar	Mar	Mar	Mar	Apr	Apr	Mar
SIHY	----	Mar	Mar	Apr	----	----	Apr	----
SILI	----	----	----	----	----	----	----	----
SPCO	----	Mar	----	Apr	23 Apr	25 May	Apr	Apr
SPCR	----	----	----	----	----	----	----	----
STCO	----	Mar	Mar	Mar	Mar	----	Apr	Apr
STVI	----	----	----	Mar	----	----	----	Apr

TABLE VI. (Continued):

STUDY AREA BUD KIMBALL								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
TAOF	----	----	----	----	----	----	----	Apr
TRDU	----	----	----	----	----	Apr	Apr	Apr
VIAM	----	----	----	----	----	Apr	Apr	----
VINU	----	----	----	----	23 Apr	Apr	Apr	Apr
VUOC	----	----	----	----	May	----	----	----

TABLE VI. (Continued):

STUDY AREA BUD KIMBALL								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGCR	----	----	----	----	----	----	17 Jul	13 Jun
AGCL	----	----	----	----	----	----	----	11 Jun
AGSM	----	25 Jun	30 Jun	20 Jul	1 Jul	19 Jul	17 Jul	----
AGSP	----	----	----	----	Jun	----	11 Jun	----
ALTE	----	----	20 Jun	----	----	----	24 May	19 May
ANDI	----	----	----	----	----	----	----	----
ANOC	----	----	----	----	----	----	----	20 Jun
ARHO ²	----	----	----	----	----	----	24 May	11 May
ARTR	25 Sep	20 Sep	Sep	25 Sep	17 Sep	----	22 Sep	29 Jul
ASPU	----	----	----	----	----	----	11 Jun	11 May
BOGR	----	----	----	----	----	19 Jul	----	----
BRJA	----	----	----	----	----	Jun	27 Jun	19 Jun
BRTE	----	15 Jun	25 Jun	23 Jun	8 Jun	----	11 Jun	----
CACH	----	----	----	----	8 Jun	----	----	26 May
CANU	----	----	----	----	----	----	11 Jun	15 Jun
CAAN	----	5 Jul	20 Jun	15 Jun	----	Jun	24 May	----
CHDE	----	----	----	----	----	----	----	6 Jul
CRE	----	20 Jun	15 Jun	5 Jul	May	----	----	----
CRMO	----	----	----	----	----	Jun	24 May	7 Jun
CYMO	----	----	----	----	----	----	----	----
DEPI	----	----	20 Jun	15 Jun	----	----	24 May	May
ERPU	----	----	25 Jun	15 Jun	Jun	26 Jun	11 Jun	2 Jun
GIPU	----	----	----	----	----	----	----	10 Jun
HAGL	----	----	----	----	----	----	22 Sep	----
KOCR	----	20 Jun	----	20 Jun	8 Jun	----	11 Jun	----
LARE	----	10 Jun	17 Jun	15 Jun	8 Jun	----	24 May	May
LEDE	----	----	----	----	----	----	----	30 May
LERE	----	25 Jun	25 Jun	27 Jun	----	----	11 Jun	May
LES	----	----	----	----	----	----	----	----
LOOR	----	----	----	----	17 May	----	----	30 Apr
MACA	----	----	----	----	----	----	----	6 Jun
MAGL	----	----	----	----	----	----	----	30 May
MAGR	----	15 June	----	15 Jun	----	----	----	----
MATA	----	----	23 Jun	20 Jul	1 Jul	----	----	----
OPPO	----	15 Jun	----	20 Jun	----	19 Jul	27 Jun	22 Jun
ORHY	----	----	----	----	----	----	----	----
PHHO	----	----	10 Jun	15 Jun	----	----	24 May	30 Apr
PLPA	----	----	----	----	----	Jun	11 Jun	7 Jun
POSE	----	5 Jun	25 Jun	1 Jul	8 Jun	26 Jun	11 Jun	----
SIHY	----	15 Jul	10 Jul	15 Jul	Jun	----	11 Jun	19 Jun
SILI	----	----	----	----	----	----	----	----
SPCO	----	25 Jun	30 Jun	10 Jul	----	----	----	----
SPCR	----	----	30 Jun	----	----	----	----	----
STCO	----	25 Jun	5 Jul	10 Jul	Jun	----	11 Jun	----

TABLE VI. (Continued):

STUDY AREA BUD KIMBALL								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
STVI	----	----	----	3 Jul	----	----	----	23 Jun
TAOF	----	----	----	----	----	----	----	16 May
TRDU	----	----	----	----	----	----	11 Jun	26 Jun
VIAM	----	----	----	----	----	Jun	11 Jun	23 May
VINU	----	----	15 Jun	----	17 May	----	----	7 May
VUOC	----	----	----	----	Jun	----	11 Jun	----

TABLE VI. (Continued):

STUDY AREA BUD KIMBALL								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGCR	-----	-----	-----	-----	-----	-----	7 Aug	6 Sep
AGGL	-----	-----	-----	-----	-----	-----	-----	30 Jun
AGSM	10 Aug	10 Aug	15 Aug	19 Aug	11 Aug	2 Sep	1 Sep	22 Aug
AGSP	-----	-----	-----	-----	20 Jul	10 Aug	9 Aug	-----
ALTE	12 Jul	17 Jul	20 Jul	-----	-----	19 Jul	17 Jul	10 Jul
ANDI	-----	-----	-----	-----	-----	-----	17 Jul	11 Jul
ANOC	-----	-----	-----	-----	-----	-----	-----	11 Jul
ARHO ²	-----	-----	-----	-----	-----	19 Jul	17 Jul	11 Jul
ARTR	-----	Nov	Nov	Nov	-----	1 Nov	-----	-----
ASPU	-----	-----	-----	-----	-----	-----	27 Jun	30 Jun
BOGR	-----	-----	-----	-----	-----	2 Sep	-----	-----
BRJA	-----	-----	-----	-----	-----	19 Jul	17 Jul	29 Jul
BRTE	-----	-----	20 Jul	30 Jul	1 Jul	19 Jul	27 Jun	24 Jul
CACH	-----	-----	-----	-----	1 Jul	-----	-----	13 Jul
CANU	-----	-----	-----	-----	-----	10 Aug	1 Aug	26 Jul
CAAN	20 Jul	25 Jul	25 Jul	15 Jul	-----	19 Jul	17 Jul	-----
CHDE	-----	-----	-----	-----	-----	2 Sep	Aug	14 Jul
CRE	-----	-----	-----	15 Jul	1 Jul	-----	-----	-----
CRMO	-----	-----	-----	-----	-----	19 Jul	1 Jul	11 Jul
CYMO	-----	-----	-----	15 Jul	-----	-----	-----	-----
DEPI	-----	-----	25 Jul	25 Jun	-----	19 Jul	27 Jun	4 Jul
ERPU	-----	-----	25 Jul	30 Jun	1 Jul	19 Jul	17 Jul	11 Jul
GIPU	-----	-----	-----	-----	-----	-----	9 Aug	2 Jul
HAGL	-----	-----	-----	-----	-----	-----	-----	-----
KOCR	20 Jul	10 Jul	-----	25 Jul	20 Jun	-----	17 Jul	-----
LARE	20 Jul	25 Jul	25 Jul	25 Jul	20 Jul	19 Jul	27 Jun	14 Jul
LEDE	-----	-----	-----	-----	1 Jul	19 Jul	17 Jul	17 Jul
LERE	10 Jul	15 Jul	15 Jul	10 Jul	1 Jul	19 Jul	-----	18 Jul
LES	-----	-----	-----	-----	-----	-----	17 Jul	-----
LOOR	-----	-----	-----	-----	1 Jul	26 Jun	27 Jun	21 Jun
MACA	-----	-----	-----	-----	-----	-----	-----	24 Jul
MAGL	-----	-----	-----	-----	-----	-----	-----	20 Jul
MAGR	-----	15 Jul	-----	20 Jul	-----	-----	-----	-----
MATA	-----	-----	-----	-----	20 Jul	-----	-----	-----
OPPO	Sep	30 Aug	15 Aug	5 Aug	11 Aug	-----	9 Aug	11 Sep
ORHY	-----	-----	-----	-----	-----	-----	27 Jun	-----
PHHO	-----	-----	-----	17 Aug	1 Jul	-----	17 Jul	6 Jul
PLPA	25 Jul	20 Jul	25 Jul	-----	1 Jul	19 Jul	17 Jul	7 Aug
POSE	15 Jul	1 Jul	5 Jul	20 Jul	1 Jul	19 Jul	27 Jun	-----
SIHY	20 Jul	30 Jul	30 Jul	30 Jul	1 Jul	10 Aug	17 Jul	24 Jul
SILI	-----	-----	-----	-----	-----	10 Aug	27 Jun	-----
SPCO	-----	20 Jul	25 Jul	10 Aug	-----	-----	-----	-----
SPCR	-----	-----	27 Jul	-----	-----	-----	-----	-----
STCO	25 Jul	30 Jul	30 Jul	5 Aug	1 Jun	19 Jul	17 Jul	-----

TABLE VI. (Continued):

STUDY AREA BUD KIMBALL								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
STVI	----	----	----	20 Jul	20 Jul	----	----	29 Jul
TAOF	----	----	----	----	----	----	1 Jun	9 Jul
TRDU	----	----	----	----	----	10 Aug	17 Jul	1 Aug
VIAM	----	----	----	----	----	19 Jul	Jul	18 Jul
VINU	----	----	----	----	1 Jul	----	11 Jun	15 Jun
VUOC	----	----	----	----	1 Jul	19 Jul	17 Jul	----

TABLE VI. (Continued):

STUDY AREA CEDAR MOUNTAIN								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGCR	----	5 Mar	Apr	Apr	20 Apr	Apr	Apr	13 Apr
AGSP	----	----	Apr	Apr	20 Apr	29 Apr	Apr	Apr
ARHO	----	----	----	----	20 Apr	----	----	----
ARHO ²	----	Apr	----	Apr	----	----	Apr	12 Apr
ARSP	----	Apr	----	Apr	20 Apr	29 Apr	Apr	Apr
ARTR	----	24 May	15 May	May	19 May	29 Apr	Apr	Apr
ASPU	----	Apr	Apr	Mar	----	May	Apr	Apr
ATCO	----	May	May	May	19 May	Apr	Apr	16 Apr
ATGA	----	Apr	Apr	Apr	19 May	22 May	Apr	17 Apr
CELA	----	24 May	15 May	May	19 May	----	----	Apr
CHE	----	----	----	----	----	----	----	----
CHVI	May	May	10 May	May	19 May	22 May	Apr	13 Apr
CORA	----	----	----	----	----	----	----	----
CRMO	----	----	----	----	----	----	----	Apr
CYMO	----	----	----	----	20 Apr	22 May	----	Apr
EROV	----	----	May	----	20 Apr	May	----	Apr
ERPU	----	----	10 May	Apr	20 Apr	----	----	----
HAAC	----	Apr	----	Apr	20 Apr	Jun	----	Apr
KOAM	----	11 Mar	Mar	Mar	Apr	Apr	----	25 Apr
LARE	----	----	----	----	----	----	----	----
OPPO	----	Apr	5 May	May	19 May	22 May	25 May	11 May
ORHY	----	5 Mar	----	Apr	Apr	Apr	----	Apr
PEFR	----	----	----	----	20 Apr	Apr	----	----
PHHO	----	Apr	----	Apr	20 Apr	Apr	----	----
PHLO	----	----	----	----	7 Jun	Apr	----	----
POSE	----	15 Mar	----	Mar	20 Apr	29 Apr	Apr	Apr
SAVE	----	----	----	----	----	Jun	----	----
SIAL	----	----	----	----	----	Apr	----	----
SIHY	----	10 Mar	----	----	20 Apr	Apr	----	12 Apr
SILI	----	----	----	----	May	Apr	----	----
SPCO	----	----	----	----	May	22 May	Apr	Apr
TAOF	----	----	----	----	----	----	----	----
TENU	----	Apr	10 May	Apr	19 May	22 May	----	Apr
TOIN	----	----	----	----	20 Apr	----	----	----

TABLE VI. (Continued):

STUDY AREA CEDAR MOUNTAIN									
Seed Dissemination									
Species	1973	1974	1975	1976	1977	1978	1979	1980	
AGCR	----	----	Aug	10 AUG	19 Jul	30 Aug	6 Aug	20 Sep	
AGSP	----	----	5 Aug	20 Aug	----	30 Aug	6 Aug	17 Aug	
ARHO	----	----	----	----	----	----	----	----	
ARHO ²	----	----	----	5 Aug	----	8 Aug	24 Jun	24 Jul	
ARSP	----	----	Jul	1 Aug	27 Jun	8 Aug	15 Jul	25 Aug	
ARTR	----	----	----	Nov	5 Nov	----	----	----	
ASPU	30 Jun	17 Jun	25 Jun	1 Jul	27 Jun	----	24 Jun	3 Aug	
ATCO	----	----	----	1 Jul	----	----	6 Aug	Sep	
ATGA	----	----	----	1 Aug	----	----	15 Jul	20 Sep	
CELA	----	----	----	----	----	----	6 Aug	Sep	
CHE	----	----	----	----	----	----	----	Sep	
CHVI	----	----	----	Sep	5 Nov	----	----	----	
CORA	----	----	----	----	----	30 Aug	----	8 Sep	
CRMO	----	----	----	----	----	----	----	11 Jul	
CYMO	----	----	----	----	19 Jul	----	----	----	
EROV	----	Aug	1 Aug	5 Aug	19 Jul	----	----	20 Sep	
ERPU	Jul	Jul	Aug	20 Jul	----	----	----	----	
HAAC	----	21 Jun	20 Jul	1 Jul	----	----	24 Jun	13 Jul	
KOAM	----	----	Aug	----	----	----	6 Aug	20 Sep	
LARE	----	----	----	----	----	----	----	14 Jul	
OPPO	----	----	----	10 Aug	9 Sept	----	6 Aug	----	
ORHY	Aug	----	25 Jul	1 Aug	----	17 Jul	----	28 Jul	
PEFR	----	----	----	----	----	----	----	Aug	
PHHO	28 Jun	20 Jun	Jul	30 Jun	----	----	24 Jun	11 Jul	
PHLO	----	15 Jun	15 Jul	20 Jul	----	----	24 Jun	24 Jul	
POSE	Jul	5 Jul	Jul	10 Jul	27 Jun	17 Jul	15 Jul	15 Aug	
SAVE	----	----	----	----	----	----	----	----	
SIAL	----	----	----	----	----	17 Jul	----	26 Jul	
SIHY	1 Aug	Jul	Aug	10 Aug	----	17 Jul	15 Jul	11 Aug	
SILI	28 Jun	----	----	----	----	8 Aug	1 Jul	25 Jul	
SPCO	----	----	Aug	20 Jul	----	----	15 Jul	4 Aug	
TAOF	----	----	----	----	----	----	Jun	----	
TENU	----	----	Aug	20 Aug	----	30 Aug	15 Jul	Sep	
TOIN	----	----	----	----	----	----	15 Jul	----	

TABLE VI. (Continued)

STUDY AREA CUMBERLAND 3								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
ACMI	----	----	----	----	----	----	----	----
AGGL	----	10 Mar	----	May	19 May	May	May	Apr
AGSM	----	Apr	Mar	Apr	Apr	Apr	Apr	Apr
AGSP	----	Apr	Mar	Apr	Apr	Apr	Apr	Apr
AMAL	----	20 May	----	May	19 May	May	May	Apr
ANDI	----	May	----	Apr	19 May	May	Apr	Apr
ANSE	----	----	----	----	----	----	----	----
ARHO	----	----	----	----	19 May	----	----	----
ARHO ²	----	May	----	May	----	Apr	----	Apr
ARTR	Jun	20 May	May	May	Sep	May	May	Apr
ASCA	----	----	----	----	----	----	----	----
ASCI	----	May	----	----	19 May	Jun	----	Apr
ASDI	----	Apr	----	May	----	----	----	Apr
ASMI	----	----	----	----	----	----	----	Apr
ASPU	----	----	----	----	19 May	May	----	Apr
AST	----	----	----	----	----	----	----	----
BRTE	----	----	----	----	----	----	----	----
CANU	----	----	----	----	----	----	----	Apr
CAS	----	12 Mar	----	May	May	Apr	----	Apr
CHE	----	----	----	----	----	----	----	----
CHNA	----	----	----	----	Jun	----	----	----
CHVI	----	20 May	----	May	19 May	Apr	----	----
COPA	----	1 Jun	May	----	Apr	May	----	----
CORA	----	6 Jun	----	May	----	6 Jun	----	----
CRAC	----	30 May	----	May	----	----	----	Apr
CRFL	----	----	----	----	----	----	----	----
CYMO	----	----	----	----	----	----	----	----
DEPI	----	----	----	----	----	----	----	----
ERMI	----	14 May	May	May	19 May	Apr	----	----
EROV	----	12 Mar	----	----	----	----	----	----
ERSU	----	----	----	----	----	----	----	----
FRPU	----	----	----	----	----	----	----	----
KOCR	----	----	----	----	----	----	----	----
LARE	----	----	----	----	----	Apr	----	----
LEPE	----	----	----	----	----	May	----	----
LOSI	----	----	----	----	Apr	May	----	----
MACA	----	----	----	----	----	Jul	----	----
MELO	----	Apr	----	Apr	Apr	----	----	----
OPPO	----	May	May	May	19 May	May	22 May	30 May
ORHY	----	12 Mar	----	Mar	Apr	Apr	May	Apr
PELA	----	----	----	----	----	----	----	----
PHHO	----	Mar	----	----	----	May	----	----
PHLO	----	Mar	----	May	19 May	May	----	----
PHMU	----	----	----	----	19 May	----	----	----

TABLE VI. (Continued)

STUDY AREA CUMBERLAND 3								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
POAM	----	----	----	----	----	----	----	----
POFE	----	Mar	----	Apr	19 May	Apr	----	----
POSE	----	Mar	----	Apr	Apr	Apr	----	----
SEIN	----	----	----	----	----	May	----	Apr
SIAL	----	----	----	----	----	May	May	----
SIHY	----	----	----	----	19 May	Apr	----	----
SILI	----	----	----	----	May	Apr	----	----
STCO	----	----	----	Apr	Apr	May	May	Apr
STCO ²	----	----	----	----	----	----	----	----
SYOC	----	----	----	----	19 May	May	May	----
TAOF	----	----	----	----	----	----	----	----
TECA	----	24 May	----	May	19 May	May	May	Apr
TRDU	----	----	----	----	----	Apr	----	----
TRGY	----	----	----	May	19 May	May	May	Apr
UMB	----	----	----	Apr	----	May	----	----
VINU	----	----	----	May	19 May	May	----	----
WYAM	----	----	----	----	----	May	----	----
ZIPA	----	12 Mar	----	Mar	Apr	Apr	----	Apr

TABLE VI. (Continued):

[illegible]

TABLE VI. (Continued):

STUDY AREA CUMBERLAND 3								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
POAM	----	----	----	----	----	----	----	25 Jun
POFE	Jun	15 Jun	Jul	15 Jun	Jun	----	22 May	10 Jun
POSE	2 Jul	30 Jun	30 Jun	10 Jun	Jun	----	5 Jun	Jun
SEIN	----	----	----	----	----	Jun	5 Jun	10 Jun
SIAL	----	----	----	----	----	Jun	5 Jun	20 Jun
SIHY	5 Jul	1 Jul	----	----	----	----	25 Jun	9 Jul
SILI	----	----	----	----	----	Jun	5 Jun	----
STCO	----	Jun	Jun	Jun	----	----	25 Jun	4 Jul
STCO ²	----	----	----	----	----	----	----	4 Jul
SYOC	----	----	----	----	----	----	25 Jun	1 Jul
TAOF	----	----	----	----	----	----	----	Jun
TECA	10 Aug	10 Jul	5 Aug	1 Aug	Jul	8 Aug	15 Jul	2 Aug
TRDU	----	----	----	----	----	Jul	25 Jun	18 Jul
TRGY	----	30 May	----	----	----	----	----	Jun
UMB	----	----	----	1 Jun	----	Jun	22 May	----
VINU	----	----	Jun	----	----	----	----	11 Jun
WYAM	----	----	----	----	----	----	----	----
ZIPA	----	8 Jun	12 Jun	10 Jun	7 Jun	----	5 Jun	23 Jun

TABLE VI. (Continued):

STUDY AREA CUMBERLAND 3								
Species	Seed Dissemination							
	1973	1974	1975	1976	1977	1978	1979	1980
ACMI	----	----	----	----	----	----	----	15 Sep
AGGL	Aug	Jun	----	10 Jul	7 Jun	----	25 Jun	Aug
AGSM	20 Aug	5 Aug	Aug	----	----	8 Aug	7 Aug	19 Sep
AGSP	5 Aug	30 Jul	25 Jul	20 Aug	----	8 Aug	7 Aug	16 Aug
AMAL	----	----	----	10 Sep	9 Aug	----	15 Jul	23 Aug
ANDI	Jun	20 Jun	----	15 Jul	19 Jul	----	25 Jun	15 Jul
ANSE	----	----	----	----	----	----	----	30 Jul
ARHO	----	----	----	----	9 Aug	----	----	----
ARHO ²	5 Jul	10 Jul	Jul	1 Aug	----	17 Jul	15 Jul	10 Aug
ARTR	----	----	----	Nov	5 Nov	4 Nov	----	----
ASCA	----	----	----	----	----	----	----	----
ASCI	28 Jun	25 Jun	Jul	15 Jul	----	----	----	2 Aug
ASDI	30 Jul	15 Jul	Jul	20 Aug	----	----	25 Jun	15 Sep
ASMI	----	----	----	----	----	----	----	----
ASPU	----	----	----	----	28 Jun	17 Jul	----	12 Aug
AST	----	20 Jul	----	----	----	----	----	----
BRTE	----	----	----	----	----	----	15 Jul	26 Aug
CANU	----	----	----	----	----	----	----	27 Aug
CAS	25 Jul	----	Aug	20 Aug	9 Aug	8 Aug	7 Aug	Aug
CHE	----	----	----	----	----	----	----	Sep
CHNA	----	----	----	----	7 Sep	----	----	----
CHVI	----	----	----	1 Oct	5 Nov	4 Nov	1 Sep	Sep
COPA	----	20 Jul	Jul	25 Aug	9 Aug	----	1 Jul	12 Aug
CORA	----	----	----	30 Aug	----	30 Aug	22 Sep	Sep
CRAC	14 Aug	----	Jul	14 Jul	----	----	15 Jul	1 Jul
CRFL	----	----	----	----	----	----	----	25 Aug
CYMO	----	----	----	----	----	----	----	27 Jul
DEPI	----	20 Jun	----	----	----	----	25 Jun	7 Aug
ERMI	----	----	----	30 Oct	5 Nov	4 Nov	1 Sep	----
EROV	14 Aug	10 Jul	----	----	----	----	----	----
ERSU	----	25 Jul	----	----	----	----	----	----
FRPU	----	----	----	----	----	----	----	3 Aug
KOCR	----	----	----	----	----	----	1 Sep	----
LARE	----	----	----	----	----	26 Jun	----	4 Aug
LEPE	----	----	----	----	----	8 Aug	----	----
LOSI	----	----	----	----	28 Jun	----	----	26 Jul
MACA	----	----	----	----	----	----	----	----
MELO	----	Jul	----	10 Aug	7 Jun	----	----	15 Jul
OPPO	----	----	Aug	20 Sep	9 Aug	----	7 Aug	15 Sep
ORHY	----	----	----	20 Aug	9 Aug	8 Aug	7 Aug	26 Aug
PELA	10 Aug	15 Jul	Jul	20 Aug	----	----	25 Jun	----
PHHO	10 Jul	20 Jul	Jul	10 Jul	----	26 Jun	25 Jun	3 Aug
PHLO	10 Jul	20 Jul	Jul	10 Jul	28 Jun	26 Jun	25 Jun	10 Aug
PHMU	----	----	----	----	28 Jun	----	----	4 Aug

TABLE VI. (Continued):

STUDY AREA CUMBERLAND 3								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
POAM	----	----	----	----	----	----	----	20 Sep
POFE	25 Jul	10 Jul	25 Jul	1 Aug	28 Jun	8 Aug	15 Jul	28 Aug
POSE	15 Jul	5 Jul	Jul	15 Jul	28 Jul	17 Jul	15 Jul	21 Aug
SEIN	----	----	----	----	----	8 Aug	----	12 Aug
SIAL	----	----	----	----	----	17 Jul	15 Jul	12 Aug
SIHY	30 Jul	30 Jul	25 Jul	10 Aug	----	8 Aug	7 Aug	26 Aug
SILI	----	----	----	----	----	17 Jul	----	----
STCO	----	Jul	Jul	15 Jul	----	17 Jul	15 Jul	20 Aug
STCO ²	----	----	----	----	----	----	----	23 Aug
TAOF	----	----	----	----	----	----	----	15 Jul
TECA	----	----	----	30 Sep	7 Sep	30 Aug	1 Sep	20 Sep
TRDU	----	----	----	----	----	----	15 Jul	27 Aug
TRGY	28 Jun	20 Jun	----	----	----	----	----	4 Aug
UMB	Jul	Jun	----	1 Jul	----	8 Aug	25 Jun	----
VINU	----	Jun	Jul	----	----	----	----	----
WYAM	----	----	----	----	----	----	----	----
ZIPA	Jun	15 Jun	Jun	20 Jul	28 Jun	8 Aug	25 Jun	9 Aug

TABLE VI. (Continued):

STUDY AREA DEMER								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	----	5 Mar	5 Mar	Mar	Mar	Apr	Apr	Mar
AGSP	----	5 Mar	1 Mar	Mar	Mar	Apr	Apr	Mar
ALTE	----	----	Apr	----	Apr	Apr	Apr	Mar
ARTR	----	20 May	22 Apr	Apr	23 Apr	25 May	28 Apr	7 Apr
ASMI	----	----	----	----	----	Jun	----	May
ASPU	----	----	----	----	----	----	28 Apr	----
BOGR	----	30 Mar	25 Apr	Apr	Mar	Apr	Apr	Mar
BRTE	----	----	Mar	Mar	Mar	----	Apr	Mar
CANU	----	----	----	----	----	May	----	Mar
CHE	----	----	----	----	----	----	----	----
CHAL	----	----	----	----	----	----	----	----
CHEN	----	----	Apr	----	----	----	----	----
CHFR	----	----	----	----	----	----	----	----
CIR	----	----	Apr	May	----	----	----	----
CRY	----	----	----	----	----	----	----	----
CYMO	----	----	Mar	----	----	----	----	Mar
DEGE	----	25 Mar	5 May	Apr	23 Apr	Apr	Apr	Mar
DEPI	----	----	----	----	Apr	Apr	----	12 Apr
ERPU	----	Mar	----	----	----	----	----	----
GIPU	----	----	----	----	----	Jun	----	----
HOJU	----	----	----	----	----	----	----	----
KOCR	----	----	----	----	----	----	----	Mar
LASC	----	----	----	----	----	----	----	Jun
LARE	----	----	May	May	----	Apr	28 Apr	----
LEDE	----	----	May	May	May	25 May	----	12 Apr
LUPU	----	----	20 May	----	----	----	----	Apr
MACA	----	----	----	----	----	----	----	----
MATA	----	----	----	----	----	----	----	----
OPPO	----	28 Mar	----	Apr	23 Apr	25 May	28 Apr	30 Apr
ORHY	----	----	5 Mar	Mar	----	May	Apr	Apr
PHHO	----	----	----	----	----	----	----	Mar
PLPA	----	----	Mar	May	Apr	25 May	----	Apr
POSE	----	1 Mar	1 Mar	Mar	Mar	Apr	----	Mar
SAIB	Jun	----	----	Jun	----	----	----	----
SIAL	----	----	----	----	----	Apr	28 Apr	6 Apr
SIHY	----	5 Mar	1 Mar	Mar	Mar	----	----	Mar
SILI	----	----	Apr	May	17 May	----	----	----
SPCO	----	25 Apr	30 Apr	May	23 Apr	Apr	Apr	Apr
STCO	----	5 Mar	5 Mar	Mar	Mar	----	Apr	Apr
TAOF	----	----	----	----	----	----	----	----
TRDU	----	----	----	----	----	----	----	17 Apr
VUOC	----	----	Mar	May	----	Apr	----	Apr

TABLE VI. (Continued):

STUDY AREA DEMER								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	20 Jun	25 Jun	5 Jul	----	----	----	----	----
AGSP	10 Jun	25 Jun	1 Jul	15 Jun	----	----	7 Jun	26 Jun
ALTE	----	----	10 Jun	----	May	May	24 May	21 May
ARTR	10 Sep	20 Sep	10 Sep	5 Sep	----	----	1 Sep	Sep
ASMI	----	----	----	----	----	----	7 Jun	Jun
ASPU	----	----	----	----	----	----	----	----
BOGR	5 Aug	5 Jul	15 Jul	12 Jul	----	Jun	27 Jun	May
BRTE	----	10 Jun	12 Jun	15 Jun	9 Jun	----	7 Jun	May
CANU	----	----	----	----	----	Jun	7 Jun	13 Jun
CHE	----	----	----	----	----	----	7 Jun	22 Jun
CHAL	----	----	----	----	----	----	----	----
CHEN	----	----	----	----	----	----	----	----
CHFR	----	----	----	----	----	----	----	----
CIR	----	----	----	----	----	----	----	----
CRY	----	----	----	----	----	----	----	----
CYMO	----	----	1 Jun	----	----	----	Jun	2 May
DEGE	30 Jul	10 Jun	20 Jun	15 Jun	9 Jun	----	24 May	31 May
DEPI	----	----	----	----	9 Jun	----	24 May	May
ERPU	----	----	----	----	----	----	7 Jun	24 May
GIPU	----	----	----	----	----	Jul	----	----
HOJU	----	----	----	----	----	----	Jun	----
KOCR	----	----	----	----	----	----	----	----
LASC	----	----	----	----	----	----	17 Jul	9 Aug
LARE	----	5 Jun	15 Jun	28 May	----	----	24 May	May
LEDE	----	----	----	Jun	----	Jun	Jun	4 Jun
LUPU	----	----	25 Jun	----	----	----	7 Jun	23 May
MACA	----	----	----	----	----	----	7 Jun	10 Jun
MATA	----	----	----	----	----	----	24 May	2 Jul
OPPO	----	25 Jun	----	Jun	----	20 Jul	7 Jun	12 Jun
ORHY	5 Jun	----	10 Jun	Jul	----	----	Jun	17 Jun
PHHO	----	----	----	----	----	----	----	27 Apr
PLPA	----	5 Jun	15 Jun	25 Jun	9 Jun	Jun	7 Jun	16 Jun
POSE	1 Jun	10 Jun	15 Jun	25 Jun	----	Jun	24 May	May
SAIB	----	----	----	----	----	----	----	----
SIAL	----	----	----	----	----	28 Jun	7 Jun	7 Jun
SIHY	----	25 Jun	15 Jun	15 Jun	----	----	7 Jun	5 Jun
SILI	----	----	May	10 Jul	9 Jun	----	----	----
SPCO	5 Jul	20 Jun	1 Jul	----	----	----	----	26 May
STCO	5 Jun	25 Jun	25 Jun	15 Jun	Jun	----	7 Jun	24 Jun
TAOF	----	----	----	----	----	----	----	6 May
TRDU	----	----	----	----	----	----	7 Jun	11 Jan
VUOC	----	10 Jun	12 Jun	25 Jun	----	----	24 May	27 May

TABLE VI. (Continued):

Species	STUDY AREA DEMER							
	Seed Dissemination							
	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	1 Nov	15 Aug	20 Aug	20 Aug	----	----	9 Aug	5 Sep
AGSP	1 Aug	30 Jul	5 Aug	30 Jul	11 Aug	20 Jul	17 Jul	5 Sep
ALTE	----	----	10 Jul	----	30 Jun	20 Jul	17 Jul	14 Jul
ARTR	15 Nov	15 Nov	10 Nov	Nov	----	1 Nov	----	----
ASMI	----	----	----	----	----	9 Aug	9 Aug	17 Aug
ASPU	----	----	----	----	----	----	27 Jun	----
BOGR	10 Aug	30 Jul	5 Aug	20 Aug	----	20 Jul	9 Aug	21 Jul
BRTE	24 Jun	5 Jul	10 Jul	30 JUL	30 Jun	20 Jul	27 Jun	21 Jul
CANU	----	----	----	----	----	20 Jul	9 Aug	8 Aug
CHE	----	----	----	----	----	----	17 Jul	22 Aug
CHAL	----	----	----	----	----	2 Sep	----	----
CHEN	----	----	----	----	1 Oct	----	----	----
CHFR	----	----	----	----	----	9 Sep	----	----
CIR	----	----	----	----	----	----	----	----
CRY	----	----	----	----	----	9 Aug	----	----
CYMO	----	----	20 Jun	----	----	----	----	13 Jun
DEGE	1 Aug	10 Jul	20 Jul	15 Jun	30 Jun	20 Jul	17 Jul	10 Jul
DEPI	----	----	----	----	----	20 Jul	17 Jul	16 Jul
ERPU	----	----	----	----	----	----	17 Jul	13 Jul
GIPU	----	----	----	----	----	2 Sep	Jul	----
HOJU	----	----	----	----	----	----	----	----
KOCR	----	----	----	----	----	----	17 Jul	----
LASC	----	----	----	----	----	----	1 Sep	18 Sep
LARE	Jul	15 Jul	20 Jul	20 Jul	20 Jul	9 Aug	27 Jun	16 Jul
LEDE	----	----	20 Jul	25 Jul	30 Jun	20 Jul	17 Jul	9 Jul
LUPU	----	----	20 Jul	----	----	----	9 Aug	9 Jul
MACA	----	----	----	----	----	----	17 Jul	----
MATA	----	----	----	----	----	----	----	----
OPPO	Aug	10 Aug	----	30 Jul	11 Aug	----	17 Jul	4 Sep
ORHY	20 Jul	----	20 Jul	Aug	20 Jul	9 Aug	17 Jul	13 Jul
PHHO	----	----	----	----	----	----	----	6 Jul
PLPA	10 Jul	15 Jul	29 Jul	10 Aug	30 Jun	20 Jul	9 Aug	1 Sep
POSE	1 Jul	1 Jul	1 Jul	10 Aug	30 Jun	20 Jul	27 Jun	12 Jul
SAIB	Jul	----	----	----	----	----	----	----
SIAL	----	----	----	----	----	----	17 Jul	2 Sep
SIHY	2 Aug	25 Jul	30 Jul	30 Jul	20 Jul	9 Aug	17 Jul	4 Sep
SILI	----	----	20 Jul	10 Aug	11 Aug	----	----	----
SPCO	30 Jul	15 Jul	25 Jul	----	----	----	----	14 Jul
STCO	25 Jul	20 Jul	20 Jul	30 Jul	20 Jul	20 Jul	17 Jul	28 Jul
TAOF	----	----	----	----	----	----	----	17 Jun
TRDU	----	----	----	----	----	9 Aug	27 Jun	25 Jul
VUOC	----	20 Jun	Jul	20 Jul	30 Jun	20 Jul	27 Jun	14 Jul

TABLE VI. (Continued):

STUDY AREA FARSON								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	-----	30 Mar	26 Apr	Apr	21 Apr	Apr	Apr	29 Apr
ALTE	-----	-----	-----	Apr	21 Apr	Apr	-----	-----
ARHO	-----	-----	-----	-----	21 Apr	22 May	Apr	25 Apr
ARHO ²	-----	-----	May	May	18 May	Apr	-----	22 Apr
ARTR	-----	20 May	10 May	15 May	21 Apr	22 May	4 May	13 Apr
ASPU	-----	15 Mar	30 Apr	Apr	Jul	Apr	-----	Apr
ASSP	-----	15 Mar	30 Apr	-----	-----	-----	-----	Apr
ATCO	-----	27 Apr	26 Apr	Apr	7 Jun	Apr	4 May	25 Apr
CAEL	-----	15 Apr	20 May	Apr	21 Apr	Apr	May	26 Apr
CAMO	-----	-----	-----	-----	-----	-----	-----	-----
CELA	-----	27 Apr	30 Apr	15 May	18 May	Apr	May	26 Apr
CHLE	-----	-----	-----	-----	-----	Jun	-----	-----
CHER	-----	Apr	-----	-----	-----	-----	-----	-----
CHVI	May	Apr	15 May	25 Apr	18 May	Apr	May	28 Apr
CRFL	-----	-----	-----	-----	-----	22 May	-----	May
CYMO	-----	-----	May	Apr	21 Apr	22 May	-----	Apr
DEPI	-----	-----	-----	-----	-----	Apr	-----	Apr
ERCE	-----	-----	-----	-----	10 Aug	22 May	5 May	3 May
EROV	-----	Apr	10 May	5 May	18 May	Apr	Apr	16 Apr
GACO	-----	-----	Apr	-----	-----	-----	-----	-----
GIPU	-----	-----	-----	-----	-----	-----	-----	-----
GRSP	-----	Apr	15 May	25 Apr	18 May	Apr	Apr	26 Apr
HAAC	-----	Apr	10 May	Apr	18 May	Apr	-----	29 May
KOCR	-----	-----	15 May	Apr	21 Apr	22 May	-----	27 Apr
LARE	-----	-----	-----	-----	-----	Apr	-----	Apr
LEPU	-----	-----	MAY	-----	-----	Jun	May	27 Apr
MACA	-----	-----	-----	-----	-----	-----	-----	-----
OPFR	-----	-----	-----	-----	-----	-----	-----	-----
OPPO	May	27 Apr	10 May	Apr	18 May	22 May	4 May	1 Jun
ORHY	-----	15 Apr	5 May	Apr	21 Apr	22 May	May	30 Apr
PECL	-----	-----	30 Apr	May	18 May	Apr	-----	-----
PHHO	May	30 May	5 May	Apr	18 May	22 May	-----	26 Apr
POSE	-----	15 Apr	5 May	Mar	21 Apr	Apr	May	Apr
SIHY	-----	30 Mar	30 Apr	Apr	21 Apr	Apr	-----	Apr
SILI	May	Apr	May	Apr	-----	Apr	-----	Apr
SPCO	-----	10 May	5 May	May	Jul	Apr	-----	-----
STCO	-----	15 Apr	5 May	Apr	21 Apr	22 May	Apr	29 Apr
TECA	-----	-----	-----	-----	-----	-----	-----	-----
TESP	-----	-----	-----	-----	-----	-----	-----	29 Apr
XASA	-----	-----	-----	-----	18 May	Apr	Apr	26 Apr

TABLE VI. (Continued):

STUDY AREA FARSON								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	20 Jul	15 Jul	----	15 Jul	----	17 Jul	----	16 Jul
ALTE	----	----	25 Jun	25 May	----	7 Jun	Jun	18 Jun
ARHO	----	----	----	----	----	27 Jun	25 Jun	27 Jun
ARHO ²	----	----	----	10 Jul	----	7 Jun	22 May	7 Jun
ARTR	10 Sep	21 Sep	10 Sep	10 Sep	----	----	2 Sep	----
ASPU	Jun	23 May	10 Jun	20 Jun	----	Jun	5 Jun	10 Jun
ASSP	----	27 Apr	----	----	----	----	----	6 Jun
ATCO	20 Jul	10 Aug	20 Jun	Jul	----	----	5 Jun	5 Jul
CAEL	----	25 May	----	20 May	May	7 Jun	5 Jun	29 Jun
CAMO	----	----	----	----	----	----	----	----
CELA	10 Aug	10 Sep	30 Jul	----	Sep	----	5 Jun	24 Jun
CHLE	----	----	----	----	----	----	----	17 Jul
CHER	15 Aug	----	----	----	----	----	----	----
CHVI	15 Aug	24 Aug	10 Aug	5 Aug	----	----	16 Jul	23 Jul
CRFL	----	----	----	----	----	----	----	----
CYMO	----	----	Jun	----	----	----	----	1 Jun
DEPI	----	----	----	----	----	27 Jun	----	1 Jun
ERCE	----	----	----	----	----	17 Jul	16 Jul	26 Jun
EROV	5 Jul	10 Jul	15 Jun	10 Jul	----	27 Jun	5 Jun	26 Jun
GACO	----	----	----	----	----	----	----	----
GIPU	----	----	----	----	----	----	----	----
GRSP	----	----	5 Jun	25 Jul	----	----	----	26 Jun
HAAC	----	----	20 Jun	Jul	----	Jun	----	16 Jun
KOCR	----	----	----	20 Jun	----	Jun	5 Jun	3 Jul
LARE	----	----	----	----	----	Jun	----	----
LEPU	----	----	----	----	----	Jun	25 Jun	17 Jun
MACA	----	----	----	----	----	----	----	12 Aug
OPFR	----	----	----	----	----	----	----	----
OPPO	25 Jul	10 Jul	Jul	5 Jul	----	----	25 Jun	4 Jul
ORHY	Jun	25 Jun	5 Jul	10 Jul	----	----	25 Jun	6 Jul
PECL	6 Jun	15 Jun	5 Jun	----	Apr	Jun	22 May	13 Jun
PHHO	----	5 Jun	10 Jun	1 Jun	----	7 Jun	4 May	1 Jun
POSE	Jun	6 Jun	20 Jun	25 Jun	----	Jun	5 Jun	18 Jun
SIHY	Jun	25 Jun	5 Jul	10 Jul	----	Jun	25 Jun	1 Jul
SILI	----	5 Jun	5 Jun	May	27 Jun	Apr	5 Jun	17 Jun
SPCO	----	10 Jun	5 Jul	Jun	----	27 Jun	----	28 Jun
STCO	10 Jul	30 Jun	10 Jul	Jul	----	----	----	30 Jun
TECA	----	----	----	----	----	----	----	----
TESP	----	----	----	----	----	----	25 Jun	5 Jul
XASA	----	----	----	----	----	Jul	16 Jul	----

TABLE VI. (Continued):

[illegible]

TABLE VI. (Continued):

STUDY AREA HORSE CREEK								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	----	5 Mar	Apr	Apr	----	Apr	----	----
AGSP	----	5 Mar	Apr	Mar	Mar	Mar	----	----
ALTE	----	----	----	Apr	----	Apr	----	----
ANDI	----	----	----	----	----	Apr	Apr	Apr
ARFE	----	15 Apr	Apr	Apr	Mar	----	----	Apr
ARHO ²	----	----	----	----	Mar	----	----	----
ARNO	----	14 May	15 May	May	23 Apr	----	Apr	Apr
ARTR	----	20 May	20 May	May	23 Apr	Apr	Apr	Apr
ASPU	----	Apr	Apr	----	23 Apr	----	Apr	----
BRCO	----	----	Apr	----	----	----	----	----
BRJA	----	----	----	----	----	----	----	----
BRTE	----	----	Apr	May	Mar	Mar	Apr	Apr
CAAN	----	----	----	----	Mar	Mar	Apr	Apr
CANU	----	30 May	Apr	May	----	----	----	----
CAS	----	20 Mar	Apr	Apr	----	----	----	----
CELA	----	25 Apr	10 May	May	Apr	Apr	Apr	Apr
CHDE	----	----	----	May	May	Apr	----	----
CIR	----	----	----	----	23 Apr	----	Apr	Apr
COPA	----	----	May	May	23 Apr	Mar	----	Apr
CRAC	----	----	----	----	----	Apr	Apr	Apr
CRBR	----	----	----	----	23 Apr	----	Apr	Apr
CRE	----	----	May	Apr	----	----	----	----
CRFL	----	----	----	----	23 Apr	----	----	----
CRY	----	----	Apr	----	----	----	----	----
CRKE	----	----	----	----	----	----	----	----
CYMO	----	----	Apr	----	----	----	Apr	----
DEPI	----	----	----	May	Apr	Apr	28 Apr	13 May
ERCE	----	----	----	----	----	----	----	16 May
ERPU	----	Apr	Apr	May	----	Apr	----	----
GACO	----	----	May	Apr	23 Apr	----	Apr	17 Apr
HAAC	----	----	----	----	23 Apr	----	Apr	----
LARE	----	----	----	May	17 May	Apr	----	21 Apr
LASE	----	----	----	----	----	----	May	----
LEDE	----	----	----	----	----	Apr	----	----
LERE	----	----	----	----	----	----	----	----
LIRU	----	----	----	----	----	----	----	----
LOOR	----	----	----	----	----	Apr	----	----
MACA	----	30 Mar	----	May	----	May	----	6 May
MAGR	----	----	Jun	May	----	May	----	----
OPPO	----	----	May	Apr	23 Apr	Apr	28 Apr	1 May
ORHY	----	5 Mar	Apr	May	----	----	----	----
PECL	----	----	----	----	Apr	Apr	Apr	----
PEN	----	----	Apr	Apr	----	----	----	----
PHHO	----	----	Apr	Apr	23 Apr	Apr	28 Apr	----
POSE	----	20 Feb	10 Mar	Apr	Mar	Apr	----	----
RHTR	----	----	----	----	----	----	----	----
SAIB	26 Jun	20 Jun	15 Jun	Jun	23 Apr	----	----	----

TABLE VI. (Continued):

STUDY AREA HORSE CREEK								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
SIHY	----	5 Mar	Apr	May	Mar	Mar	----	----
SPCO	----	----	----	May	23 Apr	Apr	Apr	----
STCO	----	10 Mar	Apr	May	Mar	Apr	Apr	----
TRDU	----	20 May	15 May	Apr	----	Apr	Apr	18 Apr
VINU	----	5 Mar	----	Apr	----	Apr	Apr	----
VIVA	----	----	----	----	Apr	----	Apr	----
XASA	----	----	----	----	23 Apr	Mar	Apr	12 Apr
YUGL	----	----	----	----	17 May	----	28 Apr	----
ZIVE	----	20 Apr	Apr	Apr	Mar	Apr	Apr	----

TABLE VI. (Continued):

STUDY AREA HORSE CREEK								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	25 Jun	5 Jul	10 Jul	----	----	Jul	Jun	----
AGSP	20 Jun	30 Jun	5 Jul	10 Jun	Jun	Jun	24 May	----
ALTE	----	----	9 Jun	May	----	Jun	24 May	----
ANDI	----	----	----	----	----	----	24 May	15 May
ARFE	20 Jun	10 Jul	15 Jul	Jul	----	----	Jun	23 Jun
ARHO ²	----	----	----	----	----	----	----	5 Jun
ARNO	20 Sep	20 Sep	15 Sep	10 Oct	----	----	2 Sep	17 Sep
ARTR	10 Sep	20 Sep	20 Sep	10 Oct	----	24 Sep	2 Sep	17 Sep
ASPU	----	20 May	25 Sep	----	----	----	7 Jun	----
BRCO	----	25 Jun	Jun	----	----	----	----	----
BRJA	----	----	----	----	----	----	----	----
BRTE	----	15 Jun	30 Jun	May	----	----	24 May	8 Jun
CAAN	----	----	----	----	8 Jun	Jun	7 Jun	25 May
CANU	20 Jun	15 Jun	5 Jul	Jun	----	30 Jun	7 Jun	8 Jun
CAS	----	5 Jun	10 Jun	10 Jun	----	----	----	----
CELA	25 Jul	20 Jul	20 Jul	25 Sep	----	20 Jul	9 Aug	25 Jul
CHDE	----	----	5 Jul	Jun	8 Jun	----	----	29 Jun
CIR	----	----	----	----	----	----	27 Jun	22 Jul
COPA	----	----	30 Jun	----	17 May	----	----	----
CRAC	----	----	----	----	----	30 Jun	----	----
CRBR	----	----	----	----	8 Jun	----	24 May	25 May
CRE	----	25 May	25 Jun	10 Jun	----	----	----	----
CRFL	----	----	----	----	----	----	----	----
CRY	30 Jun	10 Jun	10 Jun	----	----	----	----	----
CRKE	----	----	----	----	----	----	----	----
CYMO	----	----	5 Jun	----	----	----	24 May	----
DEPI	30 Jun	----	5 Jun	10 Jun	May	Jun	24 May	10 Jun
ERCE	----	----	----	----	----	----	2 Sep	27 Jul
ERPU	25 Jun	20 Jun	25 Jun	7 Jun	----	30 Jun	24 May	29 Jun
GACO	----	5 Jun	30 Jun	Jun	8 Jun	----	27 Jun	13 Jun
HAAC	----	----	----	----	----	----	24 May	20 May
LARE	26 Jun	----	20 Jun	Jun	----	Jun	24 May	1 Jun
LASE	----	----	----	----	----	10 Aug	----	----
LEDE	----	----	----	----	----	----	----	----
LERE	----	----	30 Jun	----	----	----	----	----
LIRU	----	----	----	----	----	----	7 Jun	17 Jun
LOOR	----	----	----	----	----	----	----	31 May
MACA	25 Jun	20 Jun	----	10 Jul	----	20 Jul	7 Jun	10 Jul
MAGR	----	20 Jun	Jul	----	----	----	----	21 Jun
OPPO	5 Jun	20 Jun	9 Jun	1 Jul	----	30 Jun	27 Jun	15 Jun
ORHY	----	5 Jun	1 Jul	Jun	8 Jun	----	7 Jun	----
PECL	----	----	----	----	8 Jun	Jun	----	21 Jun
PEN	----	----	15 Jul	12 Jun	----	----	----	----
PHHO	----	30 May	5 Jun	10 Jun	----	25 May	24 May	7 May
POSE	----	20 Jun	25 Jun	15 Jun	8 Jun	----	24 May	----
RHTR	----	----	----	----	----	----	----	----
SAIB	----	25 Aug	5 Aug	25 Aug	17 Sep	----	18 Jul	----

TABLE VI. (Continued):

STUDY AREA HORSE CREEK								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
SIHY	20 Jun	1 Jul	5 Jul	10 Jun	8 Jun	----	7 Jun	----
SPCO	----	5 Jul	5 Jul	10 Jun	8 Jun	----	7 Jun	Jun
STCO	20 Jun	1 Jul	1 Jul	15 Jun	Jun	----	7 Jun	----
TRDU	----	15 Jun	30 Jun	Jun	----	Jun	24 May	10 Jul
VINU	----	20 Jun	25 Jun	Jun	----	----	----	2 May
VIVA	----	----	----	----	17 May	----	----	----
XASA	----	----	----	----	17 Sep	24 Sep	2 Sep	16 Aug
YUGL	----	----	----	----	8 Jun	----	----	16 Jun
ZIVE	----	30 May	30 May	23 May	----	----	27 Jun	----

TABLE VI. (Continued):

STUDY AREA HORSE CREEK								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	10 Nov	20 Aug	20 Aug	15 Aug	----	3 Sep	Jul	----
AGSP	30 Jul	10 Jul	15 Jul	30 Jul	20 Jul	10 Aug	27 Jun	----
ALTE	----	----	10 Jul	20 Jul	----	20 Jul	27 Jun	----
ANDI	----	----	----	----	----	----	27 Jun	9 Jul
ARFE	1 Aug	15 Jul	20 Jul	10 Aug	30 Jun	----	18 Jul	----
ARHO ²	----	----	----	----	8 Jun	----	----	17 Jul
ARNO	5 Nov	5 Nov	5 Nov	Nov	----	----	----	----
ARTR	20 Nov	10 Nov	5 Nov	Nov	----	----	----	----
ASPU	25 Jun	15 Jun	20 Jun	----	8 Jun	----	Jul	----
BRCO	2 Aug	25 Jul	20 Jul	----	----	----	----	----
BRJA	----	----	----	----	----	10 Aug	----	----
BRTE	25 Jul	5 Jul	10 Jul	5 Jul	30 Jun	20 Jul	27 Jun	12 Jul
CAAN	----	----	----	----	30 Jun	20 Jul	27 Jun	----
CANU	15 Jul	15 Jul	20 Jul	5 Aug	----	20 Jul	27 Jun	14 Jul
CAS	20 Jul	25 Jul	15 Jul	2 Jul	----	----	----	----
CELA	20 Sep	20 Sep	20 Sep	Nov	----	----	----	----
CHDE	----	----	25 Jul	Aug	----	3 Sep	27 Jun	----
CIR	----	----	----	----	30 Jun	----	18 Jul	2 Sep
COPA	----	----	Jul	20 Sep	----	----	18 Jul	----
CRAC	----	----	----	----	----	20 Jul	27 Jun	----
CRBR	----	----	----	----	30 Jun	----	18 Jul	17 Jul
CRE	----	Jun	Jul	10 Jul	----	----	----	----
CRFL	----	----	----	----	30 Jun	----	----	----
CRY	2 Aug	5 Jul	10 Jul	----	----	----	----	----
CRKE	----	----	----	----	----	----	----	----
CYMO	----	----	20 Jun	----	----	----	----	----
DEPI	Jul	----	10 Jul	10 Jul	30 Jun	20 Jul	27 Jun	Jul
ERCE	----	----	----	----	----	----	----	Sep
ERPU	20 Jul	10 Jul	10 Jul	30 Jul	----	20 Jul	27 Jun	16 Jul
GACO	30 Jun	5 Aug	25 Jul	20 Aug	20 Jun	----	18 Jul	----
HAAC	----	----	----	----	8 Jun	----	Jun	5 Jun
LARE	23 Jul	----	25 Jul	25 Jul	30 Jun	20 Jul	27 Jun	----
LASE	----	----	----	----	----	----	----	----
LEDE	----	----	----	----	----	20 Jul	27 Jun	----
LERE	----	----	25 Jul	----	----	----	----	----
LIRU	----	----	----	----	----	----	----	28 Aug
LOOR	----	----	----	----	----	20 Jul	7 Jun	----
MACA	25 Jul	25 Jul	----	20 Aug	----	----	18 Jul	----
MAGR	----	Jul	----	25 Aug	----	----	----	----
OPPO	----	20 Aug	10 Sep	10 Aug	20 Jul	24 Sep	18 Jul	21 Aug
ORHY	5 Aug	15 Jul	25 Jul	15 Aug	20 Jul	24 Sep	27 Jun	----
PECL	----	----	----	----	30 Jun	----	27 Jun	24 Jul
PEN	----	----	30 Jul	10 Jul	----	----	----	----
PHHO	26 Jun	15 Jun	5 Jul	25 Jun	30 Jun	30 Jun	27 Jun	22 Jul
POSE	15 Jul	5 Jul	5 Jul	5 Aug	30 Jun	10 Aug	27 Jun	----
RHTR	----	----	----	----	----	----	----	----
SAIB	----	Sep	----	Sep	----	----	----	----

TABLE VI. (Continued):

STUDY AREA HORSE CREEK								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
SIHY	5 Aug	10 Jul	15 Jul	30 Jul	10 Aug	----	18 Jul	----
SPCO	1 Aug	25 Jul	25 Jul	25 Jul	10 Aug	20 Jul	----	----
STCO	5 Aug	15 Jul	15 Jul	15 Aug	20 Jun	----	27 Jun	17 Jul
TRDU	----	15 Jul	15 Jul	15 Jul	----	20 Jul	27 Jun	26 Jul
VINU	25 Jun	10 Jul	10 Jul	15 Jul	----	----	----	28 Jun
VIVA	----	----	----	----	8 Jun	----	----	----
XASA	----	----	----	----	----	----	----	----
YUGL	----	----	----	----	30 Jun	----	----	Jul
ZIVE	10 Jul	10 Jul	10 Jul	20 Jun	8 Jun	20 Jul	----	----

TABLE VI. (Continued):

STUDY AREA MESA ANTELOPE								
Species	Growth Initiation							
	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	----	30 Mar	Mar	Apr	21 Apr	Apr	Apr	26 Apr
ALTE	----	----	----	----	21 Apr	----	----	----
ARNO	----	----	Jun	----	----	----	----	----
ARHO	----	----	----	----	Aug	----	----	----
ARHO ²	----	----	----	May	----	Apr	----	Apr
ARTR	May	23 May	May	May	21 Apr	22 May	Apr	Apr
ASCI	----	----	----	----	----	May	----	----
ASPU	----	----	----	----	----	----	----	----
ASSP	----	----	----	May	21 Apr	22 May	----	Apr
ATGA	----	----	----	May	----	Jun	----	Apr
CAEL	----	May	May	Apr	21 Apr	22 May	May	23 Apr
CELA	May	20 May	May	May	May	Apr	May	Apr
CHVI	May	23 May	May	May	May	22 May	----	Apr
CORA	----	----	----	----	----	Jun	----	----
CYMO	----	----	----	----	Mar	----	Apr	Apr
ERCA ²	----	Mar	----	Apr	May	22 May	----	Apr
ERCE	----	----	----	----	----	----	----	----
EROV	----	Mar	----	May	21 Apr	22 May	Apr	Apr
GIPU	----	----	----	----	----	----	----	----
HAAC	----	----	----	Apr	21 Apr	May	Apr	Apr
LARE	----	----	----	----	----	----	----	----
LEAL	----	----	----	----	----	----	----	----
LEPU	----	May	May	----	May	May	Apr	Apr
LOOM	----	----	----	----	----	----	----	May
MACA	May	----	----	Jun	May	May	May	Apr
MATA	----	----	----	----	May	----	----	----
OPPO	----	May	----	May	May	22 May	4 May	11 May
ORHY	----	30 Mar	----	Apr	21 Apr	22 May	May	23 Apr
PELA	----	----	----	May	21 Apr	----	----	----
PHHO	----	30 Mar	----	Apr	21 Apr	22 May	----	Apr
POFE	----	----	----	----	----	22 May	----	Apr
POSE	----	Mar	----	Apr	21 Apr	Apr	Apr	23 Apr
SIHY	----	Mar	----	Apr	21 Apr	Apr	Apr	24 Apr
SILI	----	----	----	Apr	----	Apr	----	----
SPCO	----	----	----	----	----	Jun	----	----
STCO	----	30 Mar	----	Apr	21 Apr	Apr	----	27 Apr
TRGY	----	----	----	Apr	May	22 May	----	Apr

TABLE VI. (Continued):

STUDY AREA MESA ANTELOPE								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	Jul	Jul	Jul	----	----	----	----	----
ALTE	----	----	----	----	----	----	----	18 Jun
ARNO	----	----	----	----	----	----	----	----
ARHO	----	----	----	----	----	----	----	----
ARHO ²	Jun	----	15 Jun	Jun	----	6 Jun	5 Jun	19 Jun
ARTR	10 Sep	20 Sep	10 Sep	10 Sep	7 Sep	Aug	1 Sep	Aug
ASCI	----	----	----	----	----	6 Jun	----	----
ASPU	----	----	15 Jun	----	----	----	----	----
ASSP	----	----	15 Jun	----	----	6 Jun	Jun	18 Jun
ATGA	1 Aug	----	----	25 Jul	----	26 Jun	----	----
CAEL	Jun	Jun	Jun	20 Jun	----	6 Jun	5 Jun	----
CELA	1 Aug	Aug	Jul	25 Aug	----	----	5 Jun	15 Jul
CHVI	10 Sep	Sep	1 Sep	30 Aug	9 Aug	8 Aug	15 Jul	10 Jul
CORA	----	----	----	----	----	----	----	22 Jul
CYMO	----	----	----	----	May	----	22 May	22 May
FRCA ²	----	25 May	15 Jun	20 Jul	Jun	26 Jun	22 May	Jul
ERCE	----	----	----	----	----	----	----	24 Jul
EROV	Jun	30 May	20 Jun	13 Jul	----	26 Jun	5 Jun	26 Jun
GIPU	----	----	----	----	----	----	----	19 Jun
HAAC	----	----	15 Jun	12 Jun	----	26 Jun	5 Jun	18 Jun
LARE	----	----	----	----	----	----	----	Jun
LEAL	----	----	----	----	----	----	Jun	----
LEPU	Jun	15 Jun	30 Jun	----	----	26 Jun	5 Jun	3 Jul
LOOM	----	----	----	----	----	----	22 May	18 Jun
MACA	15 AUG	1 Jun	20 Jun	20 Aug	9 Aug	8 Aug	7 Aug	25 Jul
MATA	----	----	----	----	----	----	----	----
OPPO	1 Aug	Jul	Jul	20 Jul	19 Jul	Jul	15 Jul	17 Jul
ORHY	10 Jul	30 Jun	5 Jul	1 Jul	Jun	----	25 Jun	11 Jul
PELA	17 Jul	Jul	----	22 Jul	Sep	----	7 Aug	1 Jul
PHHO	----	12 May	15 Jun	10 Jun	7 Jun	6 Jun	22 May	May
POFE	----	----	----	----	----	Jun	5 Jun	23 Jun
POSE	20 Jun	10 Jun	30 Jun	20 Jun	----	26 Jun	25 Jun	21 Jun
SIHY	Jul	Jul	Jul	1 Jul	28 Jun	----	25 Jun	9 Jul
SILI	30 Jun	----	Jun	10 Jun	----	26 Jun	4 Jun	19 Jun
SPCO	----	----	----	----	----	Jun	----	----
STCO	10 Jul	Jul	Jul	1 Jul	19 Jul	----	25 Jun	7 Jul
TRGY	----	----	5 Jun	----	----	----	----	14 Jun

TABLE VI. (Continued):

STUDY AREA MESA ANTELOPE								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	Sep	Aug	10 Aug	----	----	----	----	----
ALTE	----	----	----	----	28 Jun	----	----	24 Jul
ARNO	----	----	----	----	----	----	----	----
ARHO	----	----	----	----	----	----	----	----
ARHO ²	Jul	----	Jul	5 Aug	----	17 Jul	Jul	26 Jul
ARTR	14 Oct	5 Nov	5 Nov	10 Nov	5 Nov	4 Nov	----	----
ASCI	----	----	----	----	----	----	----	----
ASPU	----	----	Jul	----	----	----	----	----
ASSP	----	----	Jul	Oct	----	----	15 Jul	25 Jul
ATGA	----	----	----	30 Sep	----	8 Aug	----	----
CAEL	Jul	Jul	Jul	Aug	19 Jul	8 Aug	25 Jun	----
CELA	Oct	Oct	25 Oct	Oct	5 Nov	4 Nov	15 Jul	Aug
CHVI	14 Oct	Oct	Oct	Oct	5 Nov	30 Aug	7 Aug	21 Sep
CORA	----	----	----	----	----	----	----	12 Aug
CYMO	----	----	----	----	28 Jun	----	----	----
ERCA ²	10 Aug	20 Jun	Jul	Oct	19 Jul	8 Aug	25 Jun	----
ERCE	----	----	----	----	----	----	----	----
EROV	25 Jul	Jul	Jul	Oct	----	8 Aug	25 Jun	Aug
GIPU	----	----	----	----	----	----	----	26 Jul
HAAC	Jul	----	Jul	13 Jul	----	17 Jul	25 Jun	25 Jul
LARE	----	----	----	----	----	----	----	23 Jul
LEAL	----	----	----	----	----	----	----	----
LEPU	Jul	Jul	10 Aug	----	----	8 Aug	15 Jul	12 Aug
LOOM	----	----	----	----	----	----	----	----
MACA	----	Oct	1 Oct	5 Sep	5 Nov	4 Nov	1 Sep	17 Sep
MATA	----	----	----	----	----	----	----	----
OPPO	Sep	Sep	Aug	30 Sep	7 Sep	----	7 Aug	21 Sep
ORHY	10 Aug	----	1 Aug	20 Aug	5 Nov	8 Aug	15 Jul	3 Aug
PELA	----	----	----	20 Aug	5 Nov	----	1 Sep	9 Sep
PHHO	20 Jul	20 Jun	30 Jul	30 Jul	28 Jun	17 Jul	25 Jun	25 Jul
POFE	----	----	----	----	----	8 Aug	15 Jul	26 Jul
POSE	1 Aug	----	Jul	20 Aug	28 Jun	17 Jul	15 Jul	28 Jul
SIHY	5 Aug	----	4 Aug	15 Aug	19 Jul	17 Jul	15 Jul	12 Aug
SILI	10 Jul	----	----	10 Aug	----	17 Jul	----	----
SPCO	----	----	----	----	----	----	----	----
STCO	15 Aug	----	Jul	1 Aug	7 Sep	17 Jul	15 Jul	3 Aug
TRGY	15 Jul	----	20 Jun	----	----	----	----	----

TABLE VI. (Continued):

[illegible]

TABLE VI. (Continued):

STUDY AREA OWL DRAW								
Species	Growth Initiation							
	1973	1974	1975	1976	1977	1978	1979	1980
PECL	----	----	----	----	17 Apr	Apr	Apr	Apr
PEN	----	----	May	May	----	----	----	----
PHHO	----	----	May	May	17 Apr	26 May	Apr	Apr
PHMU	----	----	----	----	----	----	----	----
POFE	----	----	Apr	Apr	17 Apr	Apr	Apr	Apr
POSE	----	----	Apr	Apr	17 Apr	Apr	----	Apr
SECA	----	----	May	Apr	Apr	Apr	Apr	May
SELA	----	----	----	Apr	17 Apr	Apr	May	May
SPCO	----	----	Apr	Apr	16 May	Apr	----	May
STCO	----	----	Apr	Apr	17 Apr	----	Apr	Apr
STVI	----	----	----	----	----	----	----	Apr
TAOF	----	----	----	----	----	----	----	May
TRDU	----	----	----	Jun	----	----	----	May
TRGY	----	----	----	----	Apr	Apr	Apr	Apr
TRI	----	----	----	Apr	----	----	----	----
VIAM	----	----	May	May	Apr	Apr	----	May
VIO	----	----	----	----	Mar	Apr	Apr	----
XASA	----	----	----	----	----	Apr	Apr	Apr
ZIVE	----	----	----	----	----	Apr	Apr	Apr

TABLE VI. (Continued):

STUDY AREA OWL DRAW								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
ACLA	----	----	----	----	----	----	----	----
ACMI	----	----	----	----	----	----	----	----
AGGL	----	----	----	----	----	----	----	8 Jun
AGSM	16 Jul	5 Jul	17 Jul	17 Jul	----	----	28 Jun	Jun
AGSP	5 Jul	5 Jul	14 Jul	Jul	----	Jul	----	25 Jun
ALL	----	----	----	----	----	----	10 Aug	28 Jul
ALTE	----	----	----	----	----	----	25 May	11 Jun
ANRO	----	----	----	----	----	----	----	----
ARHO	----	1 Jun	15 Jul	14 Jul	----	1 Jul	----	19 Jun
ARHO ²	----	----	Jun	Jun	----	----	----	May
ARNO	----	20 Sep	20 Sep	5 Sep	----	29 Sep	Sep	22 Sep
ARTR	----	20 Sep	20 Sep	5 Sep	18 Sep	29 Sep	Sep	24 Sep
ASPU	----	May	25 May	10 Jun	----	9 Jun	26 May	21 May
AST	----	Jun	10 Jun	10 Jun	----	----	----	----
ASDR	----	Jun	10 Jun	15 Jul	----	----	----	20 Jun
ASMI ²	----	Jun	10 Jun	Jul	----	1 Jul	25 May	26 Jun
BASA	----	Jun	Jun	Jun	16 May	Jun	Jun	1 Jun
CACH	----	----	----	----	----	1 Jul	25 May	4 Jun
CAMI	----	----	----	----	----	----	----	----
CANU	16 Jul	4 Jul	14 Jul	1 Jul	2 Jul	----	28 Jun	30 Jun
CAS	----	----	6 Jun	25 Jun	----	----	----	----
CELA	----	Jun	5 Jul	30 Jul	Jul	11 Aug	----	7 Jul
CHDO	----	----	----	----	----	1 Jul	----	21 Jun
CHVI	Aug	Aug	Aug	25 Aug	12 Aug	----	----	----
CIR	----	----	----	----	----	----	28 Jun	22 Jun
CORA	----	----	----	----	----	11 Aug	----	----
CRBR	----	Jun	Jun	----	----	----	12 Jun	10 Jun
CRAC	----	Jun	Jun	Jun	----	----	12 Jun	6 Jun
CYMO	----	Jun	5 Jun	10 Jun	May	Jun	----	30 Apr
DEPI	Jul	Jun	----	----	----	----	----	4 Jun
DORA	Jul	Jun	----	----	16 May	----	----	6 May
EROC	----	----	10 Jun	5 Jun	May	1 Jul	25 May	18 May
GICO	----	----	----	----	----	----	----	19 Jun
GRSQ	----	----	----	----	----	11 Aug	10 Aug	12 Aug
HAAC	----	10 Jun	15 Jun	Jun	----	1 Jul	12 Jun	2 Jun
JUOS	----	Jul	5 Jul	15 Jul	----	----	----	----
JUSC	----	Jul	5 Jul	15 Jul	----	----	----	----
KOCR	Jul	5 Jun	Jun	Jun	----	1 Jul	----	15 Jun
LARE	----	----	----	----	----	----	----	5 Jun
LASC	----	----	----	----	----	----	----	----
LERE	20 Jul	20 Jun	5 Jul	Jun	17 Apr	----	Jun	15 Jun
LILE	----	Jun	25 Jun	1 Jul	----	1 Jul	Jun	11 Jun
MAVI	----	Jul	1 Jul	----	----	----	----	----
MAGR	----	15 Jun	10 Jun	Jun	----	----	28 Jun	4 Jul
MELO	----	----	----	----	----	Jun	25 May	8 May
OPPO	----	Jun	Jun	10 Jul	----	----	----	28 Jun
ORHY	----	25 Jun	Jun	10 Jul	----	----	----	23 Jun

TABLE VI. (Continued):

[illegible]

[illegible]

TABLE VI. (Continued):

STUDY AREA RED WASH								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	----	30 Mar	Mar	Apr	20 Apr	29 Apr	Apr	Apr
AGSP	----	28 Mar	Mar	Mar	Apr	29 Apr	Apr	Apr
ALTE	----	May	----	May	Apr	22 May	----	----
ARCO	----	----	----	----	----	----	----	----
ARHO	----	30 Mar	----	Jun	10 May	22 May	6 May	Apr
ARHO ²	----	----	----	----	----	----	----	Apr
ARNO	----	May	----	----	----	----	----	----
ARTR	----	May	May	May	20 May	29 Apr	Apr	Apr
ASDI	----	----	May	Apr	Apr	22 May	----	Apr
ASKE	Jun	May	----	May	Jun	22 May	May	30 Apr
ASPU	----	May	May	Apr	Apr	22 May	----	Apr
CELA	----	May	May	May	20 May	29 Apr.	----	Apr
CHDO	----	30 Mar	May	Apr	20 May	22 May	May	Apr
CHNA	----	1 Jun	Jun	May	20 May	29 Apr	Apr	1 May
CHVI	----	May	Jun	May	20 May	29 Apr	Apr	Apr
CORA	----	----	----	----	----	----	----	----
CRFL	----	May	May	May	Apr	22 May	----	Apr
CYMO	----	----	----	----	Apr	22 May	----	Apr
DEPI	----	May	----	----	----	----	----	----
ERAS	----	May	May	Apr	Apr	----	----	----
ERBR	----	----	----	----	----	----	----	11 May
ERCE	----	----	----	----	----	----	----	----
ERMI	----	May	----	May	Apr	22 May	----	----
EROV	----	May	May	May	20 May	29 Apr	----	Apr
GIAG	----	----	----	Apr	----	----	----	----
GICO	----	----	----	----	May	Jun	Apr	----
GRSP	----	May	May	May	Apr	22 May	Apr	Apr
HAAC	----	Mar	----	Apr	20 May	----	Apr	24 Apr
LEPU	----	----	----	May	20 May	22 May	----	Apr
MACA	----	----	----	May	Aug	----	----	----
MAGR	----	----	----	----	----	----	----	Apr
OPPO	----	----	----	May	20 May	22 May	21 May	18 May
ORFA	----	May	----	May	15 Aug	----	----	23 Apr
ORHY	----	11 Mar	Mar	Apr	Apr	May	Apr	24 Apr
PECL	----	----	----	----	----	----	----	Apr
PEN	----	Mar	----	Apr	Apr	29 Apr	----	----
PHHO	----	Mar	----	Apr	Apr	29 Apr	----	Apr
POSE	----	11 Mar	Mar	Apr	20 Apr	Apr	----	Apr
SIHY	----	30 Mar	Mar	Apr	----	Apr	----	----
SILI	----	----	----	May	Apr	22 May	----	----
STCO	----	Mar	20 Mar	Apr	20 Mar	22 Mar	Apr	20 Apr
TECA	----	May	May	May	20 May	29 Apr	----	Apr
TOIN	----	----	----	----	----	----	----	Apr
VINU	----	----	----	----	Apr	22 May	----	----

[illegible]

TABLE VI. (Continued):

STUDY AREA RED WASH								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	Aug	5 Aug	Aug	10 Aug	----	----	----	----
AGSP	Aug	30 Jul	Aug	10 Sep	----	----	6 Aug	30 Aug
ALTE	Jul	Jul	25 Jul	10 Jul	15 Aug	4 Aug	----	5 Aug
ARCO	----	----	----	----	----	----	----	----
ARHO	Jul	20 Jun	Aug	10 Aug	15 Aug	28 Aug	6 Aug	11 Aug
ARHO ²	----	----	----	----	----	----	25 Jun	7 Aug
ARNO	----	Oct	----	----	----	----	----	----
ARTR	----	Oct	Oct	Nov	4 Nov	6 Nov	21 Sep	
ASDI	----	Aug	Jul	18 Aug	----	----	----	11 Aug
ASKE	----	Aug	----	Oct	----	----	31 Aug	Sep
ASPU	Jul	20 Jun	Jul	20 Jul	27 Jun	17 Jul	24 Jun	24 Jul
CELA	----	----	----	Oct	4 Nov	6 Nov	Sep	----
CHDO	----	1 Aug	----	15 Aug	----	17 Jul	14 Jul	28 Jul
CHNA	----	----	----	Oct	4 Nov	6 Nov	----	----
CHVI	----	----	----	Oct	4 Nov	6 Nov	31 Aug	----
CORA	----	----	----	----	----	----	Sep	17 Sep
CRFL	----	5 Aug	Jul	18 Aug	15 Aug	4 Aug	14 Jul	22 Aug
CYMO	----	----	----	----	27 Jun	----	----	----
DEPI	----	Jul	----	----	----	----	----	----
ERAS	----	30 Jul	Jul	20 Jul	27 Jun	----	14 Jul	7 Aug
ERBR	----	----	----	----	----	----	----	----
ERCE	----	----	----	----	----	----	----	----
ERMI	----	Aug	----	25 Sep	4 Nov	6 Nov	31 Aug	----
EROV	5 Aug	Jul	Jul	25 Aug	27 Jun	4 Aug	14 Jul	30 Aug
GIAG	----	15 Aug	----	15 Jul	----	----	----	----
GICO	----	----	----	----	27 Jun	----	6 Aug	30 Aug
GRSP	Jul	----	30 Jul	----	----	4 Aug	Jul	----
HAAC	----	Jul	Jul	1 Aug	27 Jun	----	Jul	23 Jul
LEPU	Jul	5 Aug	25 Jul	18 Aug	15 Aug	4 Aug	14 Jul	23 Aug
MACA	----	Aug	----	Oct	----	6 Nov	21 Sep	----
MAGR	----	----	----	----	----	----	6 Aug	20 Sep
OPPO	----	25 Jul	Aug	1 Sep	15 Aug	4 Aug	6 Aug	4 Sep
ORFA	----	30 Jun	----	5 Jul	4 Nov	----	----	----
ORHY	5 Aug	30 Jul	25 Jul	6 Aug	15 Jul	4 Aug	Jul	21 Aug
PECL	----	----	----	----	----	----	----	25 Aug
PEN	Aug	Aug	Aug	6 Aug	14 Aug	4 Aug	14 Jul	----
PHHO	Jun	20 Jun	25 Jun	20 Jul	27 Jun	17 Jul	24 Jul	14 Jul
POSE	Jul	Aug	Jul	18 Aug	9 Sep	17 Jul	14 Jul	22 Aug
SIHY	----	30 Jul	30 Jul	18 Aug	----	29 Aug	14 Jul	22 Aug
SILI	Jul	15 Jun	Jun	18 Aug	27 Jun	----	----	28 Jul
STCO	Aug	Jul	Jul	20 Aug	----	4 Aug	Jul	15 Aug
TECA	Aug	Aug	Aug	20 Sep	4 Nov	6 Nov	Aug	----
TOIN	----	----	----	----	----	----	----	16 Aug
VINU	----	----	----	----	----	15 Aug	----	26 Jul

TABLE VI. (Continued):

[illegible]

TABLE VI. (Continued):

STUDY AREA SWEETWATER								
Growth Initiation								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	----	28 Mar	Apr	Apr	15 Apr	Apr	May	15 Apr
ALTE	----	----	----	----	----	24 May	May	Apr
ARFR	----	28 Mar	5 Apr	Apr	15 Apr	24 May	May	Apr
ARHO	----	----	----	Apr	15 Apr	24 May	May	Apr
ARHO ²	----	20 Apr	----	Apr	15 Apr	Apr	----	Apr
ARNO	----	22 May	20 May	May	15 Apr	24 May	5 May	Apr
ARTR	----	22 May	20 May	May	15 Apr	24 May	5 May	10 Apr
ASDI	----	1 Jun	----	----	----	----	----	----
ASMI ²	----	----	----	----	15 Apr	Apr	Apr	Apr
ASPU	----	20 Mar	5 Apr	Apr	15 Apr	24 May	May	Apr
ASSI	----	----	----	----	----	----	----	----
ASSP	----	25 Mar	5 Apr	Apr	15 Apr	24 May	May	Apr
CAEL	----	----	----	----	15 Apr	Apr	Apr	Apr
CAFI	----	28 Mar	Apr	Apr	15 Apr	Apr	----	Apr
CANU	----	15 May	10 May	----	----	----	----	----
CAS	----	----	----	----	----	Apr	----	----
CELA	----	----	----	----	----	----	----	----
CHDO	----	1 Jun	----	----	----	Apr	May	Apr
CHNA	----	25 Apr	30 Apr	May	15 Apr	24 May	May	Apr
CHVI	May	20 Apr	May	May	18 May	24 May	Apr	18 Apr
COPA	----	----	----	Apr	Apr	Apr	Apr	----
CRBR	----	----	----	----	15 Apr	Apr	May	----
CRFL	----	----	----	----	15 Apr	Apr	May	Apr
CRP	----	25 Mar	1 Mar	Apr	----	----	----	----
CRY	----	----	----	----	----	----	----	Apr
CYMO	----	----	May	Apr	Mar	Apr	May	----
DEGE	----	25 Mar	5 Apr	Apr	18 May	----	May	----
ERCE	----	----	----	----	----	----	----	May
ERLA	----	----	May	----	----	----	----	----
EROV	----	20 Apr	May	May	Apr	24 May	----	Apr
ERPU	----	25 Mar	5 Apr	----	----	----	----	----
HAAC	----	----	----	----	----	----	----	Apr
KOCR	----	28 Mar	Apr	Apr	15 Apr	Apr	Apr	Apr
LARE	----	----	----	----	----	----	----	May
LEAL	----	----	----	----	----	----	----	----
LEPU	----	20 May	May	Apr	15 Apr	Apr	Apr	18 Apr
LIRU	----	----	----	----	----	----	----	----
MACA	----	----	----	----	----	----	----	Apr
MAGR	----	----	----	May	May	----	----	May
OECA	----	----	----	----	----	----	----	----
OEAL	----	----	----	----	----	----	----	----
OPPO	----	25 Apr	May	Apr	15 Apr	24 May	May	6 May
ORFA	----	----	----	----	----	----	----	----
ORHY	----	28 Mar	Apr	Mar	15 Apr	24 May	May	19 Apr
OXLA	----	20 Mar	30 Mar	----	----	----	----	----
PECL	----	May	----	Apr	----	----	----	----
PEFR	----	----	----	----	15 Apr	Apr	May	Apr
PHHO	----	----	----	Apr	15 Apr	24 May	May	Apr

TABLE VI. (Continued):

Species	STUDY AREA SWEETWATER							
	Growth Initiation							
	1973	1974	1975	1976	1977	1978	1979	1980
POSE	----	25 Mar	Apr	----	----	----	Apr	Apr
PSTE	----	20 May	----	May	18 May	Jun	May	May
SADE	----	----	----	----	----	7 Jun	----	----
SPCO	----	28 Mar	5 Apr	Apr	18 May	Apr	May	Apr
STCO	----	28 Mar	Apr	Mar	15 Apr	Apr	Apr	Apr
TECA	----	28 Mar	5 Apr	Apr	18 May	24 May	Apr	Apr
TOIN	----	----	May	Apr	Mar	----	----	Apr
VINU	----	----	----	----	Apr	24 May	Apr	----
VIVA	----	5 May	----	----	----	----	----	----
ZYVE	----	28 Mar	5 Apr	Apr	15 Apr	Apr	Apr	Apr

TABLE VI. (Continued):

STUDY AREA SWEETWATER								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	12 Jul	10 Jul	5 Jul	----	----	----	----	2 Jul
ALTE	----	----	15 Jun	----	----	----	6 Jun	8 Jun
ARFR	5 Sep	Aug	Aur	25 Aut	----	22 Sep	2 Sep	25 Aug
ARHO	----	20 Jun	20 Jun	5 Jul	Jun	Jun	6 Jun	18 Jun
ARHO ²	----	25 May	30 May	25 May	----	----	23 May	May
ARNO	15 Sep	20 Sep	20 Sep	15 Sep	----	22 Sep	2 Sep	7 Sep
ARTR	15 Sep	15 Sep	20 Sep	19 Sep	----	22 Sep	2 Sep	6 Sep
ASDI	----	20 Jul	Jul	----	----	----	----	----
ASMI ²	----	----	----	----	----	----	26 Jun	15 Jun
ASPU	1 Jul	5 Jun	15 Jun	2 Jun	----	----	----	12 May
ASSI	----	----	----	----	----	----	----	15 Jun
ASSP	1 Jul	19 Jun	30 Jun	15 Jun	Jun	Jun	6 Jun	19 Jun
CAEL	----	----	----	----	----	----	Jun	18 May
CAFI	----	30 May	15 Jun	12 Jun	12 Jun	----	23 May	18 May
CANU	20 Jun	19 Jun	Jun	----	----	----	----	----
CAS	----	----	----	----	----	----	----	----
CELA	----	----	----	----	----	1 Sep	----	----
CHDO	----	20 Jun	20 Jun	----	----	----	26 Jun	19 Jun
CHNA	Sep	Sep	Sep	19 Sep	Aug	19 Jul	2 Sep	7 Sep
CHVI	10 Sep	10 Aug	Aug	15 Sep	Aug	22 Sep	2 Sep	17 Aug
COPA	29 Jun	5 Jun	20 Jun	10 Jun	8 Jun	7 Jun	6 Jun	18 Jun
CRBR	----	----	----	----	8 Jun	7 Jun	23 May	5 Jun
CRFL	----	----	----	----	Jun	30 Jun	6 Jun	3 Jun
CRP	29 Jun	22 May	30 Jun	1 Jul	----	----	----	----
CRY	----	----	----	----	----	----	----	----
CYMO	----	----	5 Jun	17 May	----	----	23 May	May
DEGE	20 Jun	25 Jun	15 Jun	May	8 Jun	----	----	23 Jun
ERCE	----	----	----	----	----	----	16 Jul	16 Jul
ERLA	----	----	15 Jun	----	----	----	----	----
EROV	20 Jun	25 May	15 Jun	15 Jun	Jun	7 Jun	23 May	10 Jun
ERPU	29 Jun	15 Jun	Jun	----	----	----	6 Jun	17 Jun
HAAC	----	----	----	----	----	----	----	12 Jun
KOCR	25 Jun	20 Jun	20 Jun	20 Jun	----	30 Jun	6 Jun	18 Jun
LARE	----	----	----	----	----	----	23 Jun	4 Jun
LEAL	----	1 Jun	24 Jun	----	----	30 Jun	6 Jun	----
LEPU	30 Jun	19 Jun	30 Jun	5 Jul	29 Jun	----	26 Jun	21 Jun
LIRU	----	----	----	----	----	----	----	22 Jun
MACA	----	----	----	----	----	----	8 Aug	3 Aug
MAGR	----	----	Jul	20 Aug	----	----	26 Jun	20 Jun
OECA	----	----	20 Jun	----	----	----	----	----
OEAL	----	----	----	----	----	----	6 Jun	Jun
OPPO	15 Jul	5 Jul	10 Jul	30 Jul	29 Jun	----	26 Jun	6 Jul
ORFA	----	20 Jun	Jul	----	----	----	----	25 Jun
ORHY	20 Jun	20 Jun	30 Jun	Jun	----	Jun	26 Jun	19 Jun
OXLA	----	10 Jun	25 Jun	----	----	----	----	----
PECL	30 Jun	20 Jun	25 Jun	Jun	----	----	----	----
PEFR	----	----	----	----	Jun	Jun	6 Jun	17 Jun
PHHO	30 Jun	22 May	30 May	May	Jun	----	23 May	19 May
POSE	15 Jun	20 Jun	----	----	----	----	6 Jun	17 Jun

TABLE VI. (Continued):

STUDY AREA SWEETWATER								
Full Bloom								
Species	1973	1974	1975	1976	1977	1978	1979	1980
PSTE	----	----	----	Jul	----	----	26 Jun	18 Jun
SADE	----	----	----	----	----	----	----	----
SPCO	----	25 Jun	30 Jun	Jul	----	----	----	23 Jun
STCO	25 Jun	25 Jun	30 Jun	25 Jun	----	7 Aug	26 Jun	24 Jun
TECA	1 Aug	1 Aug	1 Aug	5 Aug	19 Jul	7 Aug	16 Jul	22 Jul
TOIN	----	10 Jun	15 Jun	10 Sep	----	----	----	Jun
VINU	----	----	----	----	8 Jun	----	----	19 May
VIVA	----	25 May	1 Jun	----	----	----	----	----
ZYVE	----	30 May	5 Jun	May	----	----	23 May	30 May

TABLE VI. (Continued):

STUDY AREA SWEETWATER								
Seed Dissemination								
Species	1973	1974	1975	1976	1977	1978	1979	1980
AGSM	15 Sep	15 Sep	30 Jul	----	----	----	8 Aug	23 Aug
ALTE	----	----	25 Jul	----	----	19 Jul	26 Jun	16 Jul
ARFR	Nov	Oct	Oct	Oct	----	----	----	----
ARHO	----	25 Jul	----	1 Aug	19 Jul	19 Jul	16 Jul	24 Jul
ARHO ²	----	30 Jun	----	25 Jun	8 Jun	19 Jul	Jul	9 Jul
ARNO	5 Nov	25 Oct	25 Oct	Nov	----	----	----	----
ARTR	10 Nov	30 Oct	25 Oct	Nov	----	----	----	----
ASDI	----	Aug	Aug	----	----	----	----	----
ASMI	----	----	----	----	----	19 Jul	16 Jul	15 Jul
ASPU	12 Jul	10 Jun	Jun	15 Jul	29 Jun	----	26 Jun	Jul
ASSI	----	----	----	----	----	----	----	30 Jul
ASSP	Aug	25 Jul	25 Jul	25 Aug	19 Jul	1 Sep	26 Jun	19 Aug
CAEL	----	----	----	----	8 Jun	7 Aug	26 Jun	30 Jul
CAFI	20 Aug	5 Aug	5 Jul	19 Sep	8 Jun	----	26 Jun	30 Jul
CANU	5 Jul	5 Jul	----	----	----	----	----	----
CAS	----	----	----	----	----	19 Jul	----	----
CELA	----	----	----	----	----	----	----	----
CHDO	----	10 Jul	25 Jul	----	----	7 Aug	----	25 Jul
CHNA	Oct	Oct	Oct	Nov	----	----	----	----
CHVI	30 Oct	----	Oct	Nov	----	----	27 Sep	----
COPA	Jul	20 Jul	20 Jul	10 Aug	19 Jul	19 Jul	----	24 Jul
CRBR	----	----	----	----	29 Jun	19 Jul	26 Jun	30 Jul
CRFL	----	----	----	----	19 Jul	7 Aug	Jul	3 Jul
CRP	10 Aug	Aug	25 Jul	20 Aug	----	----	----	----
CRY	----	----	----	----	----	----	----	----
CYMO	----	----	20 Jun	15 Jun	8 Jun	19 Jul	6 Jun	29 Jun
DEGE	12 Jul	30 Jun	15 Jul	20 Jul	29 Jun	----	26 Jun	21 Jul
ERCE	----	----	----	----	----	----	2 Sep	26 Sep
ERLA	----	----	----	----	----	----	----	----
EROV	5 Jul	10 Jul	10 Jul	Aug	29 Jun	19 Jul	16 Jul	24 Jul
ERPU	5 Jul	5 Jul	10 Jul	----	----	----	----	27 Jul
HAAC	----	----	----	----	----	----	26 Jun	1 Jul
KOCR	24 Aug	15 Jul	15 Jul	10 Aug	29 Jun	19 Jul	16 Jul	30 Jul
LARE	----	----	----	----	----	----	----	13 Jul
LEAL	----	29 Jul	25 Jul	----	----	19 Jul	16 Jul	14 Aug
LEPU	Jul	1 Aug	20 Jul	10 Aug	19 Jul	7 Aug	16 Jul	27 Jul
LIRU	----	----	----	----	----	----	----	----
MACA	----	----	----	----	----	----	----	----
MAGR	----	----	Aug	Sep	19 Jul	7 Aug	8 Aug	29 Jul
OECA	----	----	Jul	----	----	----	----	----
OEAL	----	----	----	----	----	----	----	----
OPPO	Sep	Aug	----	Sep	18 Sep	1 Sep	8 Aug	8 Sep
ORFA	----	15 Jul	----	----	----	----	8 Aug	28 Jul
ORHY	5 Sep	10 Jul	10 Jul	15 Jul	19 Jul	19 Jul	Jul	15 Jul
OXLA	Aug	Aug	25 Jul	----	----	----	----	----
PECL	20 Jul	10 Jul	5 Aug	30 Jul	----	----	----	----
PEFR	----	----	----	----	29 Jun	7 Aug	16 Jul	21 Aug
PHHO	12 Jul	5 Jul	Jul	2 Jun	29 Jun	1 Sep	6 Jun	2 Jul

TABLE VI. (Continued):

Species	STUDY AREA SWEETWATER							
	Seed Dissemination							
	1973	1974	1975	1976	1977	1978	1979	1980
POSE	5 Jul	5 Jul	----	----	----	1 Sep	Jul	10 Jul
PSTE	----	Aug	----	Aug	----	1 Sep	16 Jul	30 Aug
SADE	----	----	----	----	----	----	----	----
SPCO	Aug	5 Jul	----	Aug	----	----	16 Jul	24 Jul
STCO	5 Sep	10 Jul	10 Jul	1 Aug	19 Jul	19 Jul	16 Jul	15 Jul
TECA	Oct	15 Oct	15 Oct	19 Sep	----	----	2 Sep	16 Sep
TOIN	----	10 Jul	Aug	Oct	----	----	----	----
VINU	----	10 Jul	Aug	Oct	29 Jun	----	26 Jun	----
VIVA	----	15 Jun	----	----	----	----	----	----
ZYVE	----	5 Jul	30 Jun	25 Jun	29 Jun	----	6 Jun	12 Jul

TABLE VI. (Continued):

[illegible]

TABLE VI. (Continued):

[illegible]

Figure 1. Phenological progression curve for 1980 for each of the prime species at each exclosure. Current year compared to earliest and latest phenological development from 1973 through 1979.

	<u>Page</u>
AGSM - <i>Agropyron smithii</i>	452
AGSP - <i>Agropyron spicatum</i>	463
ARNO - <i>Artemisia nova</i>	469
ARTR - <i>Artemisia tridentata</i>	470

PHENOPHASE

REPRODUCTIVE

16
15
14
13
12
11
10
9

AGSM - BUD KIMBALL

VEGETATIVE

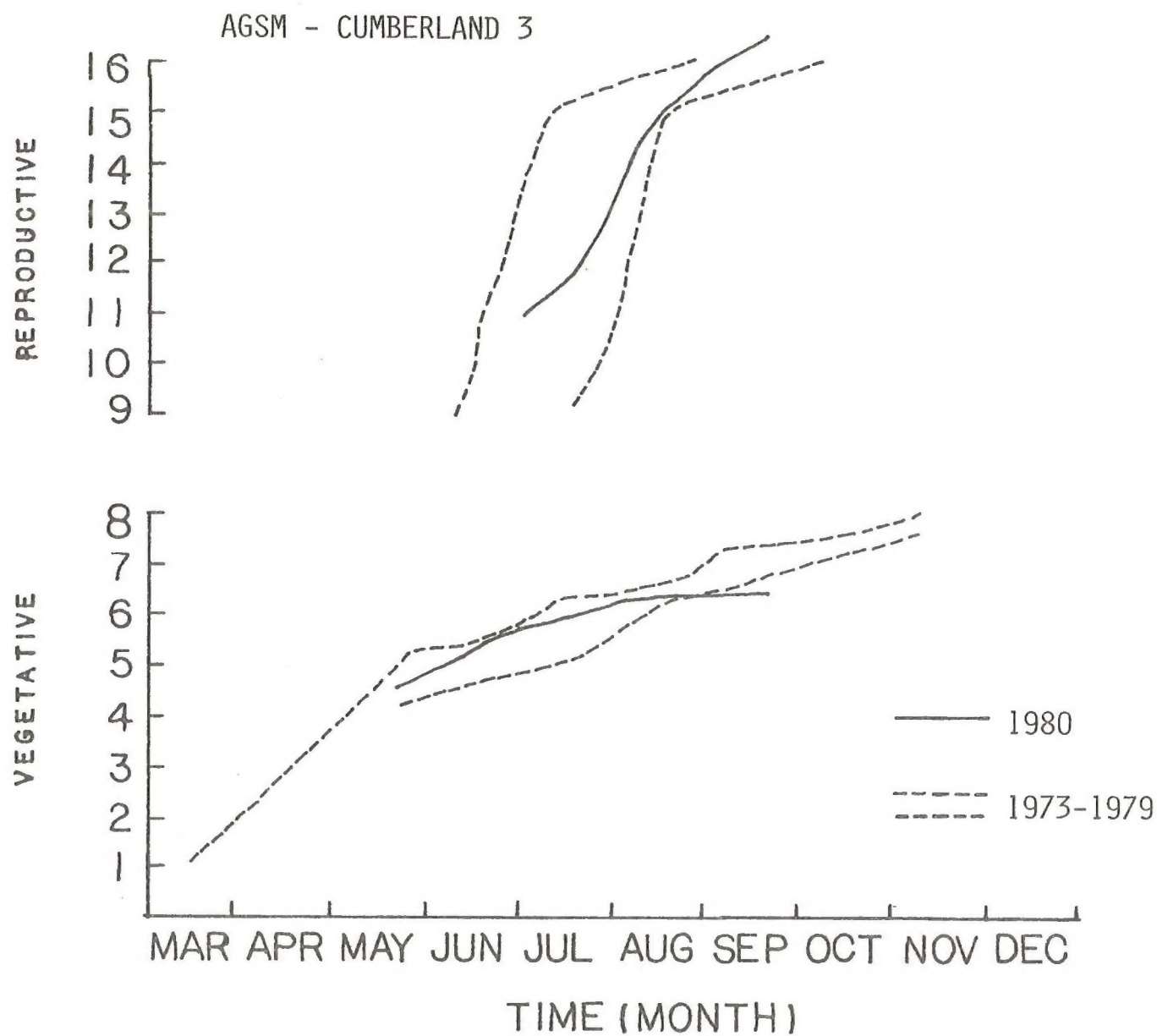
8
7
6
5
4
3
2
1

MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

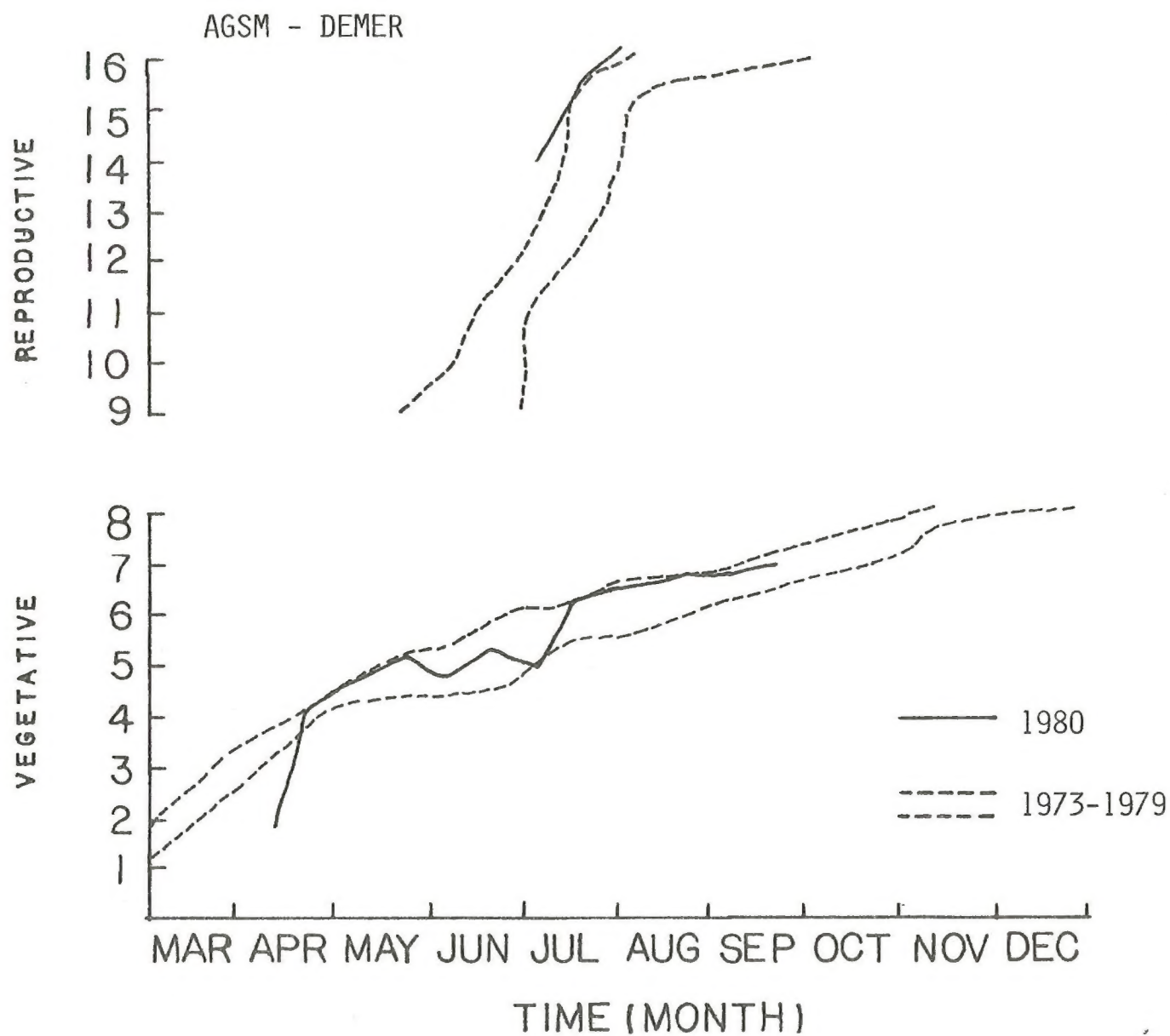
TIME (MONTH)

— 1980
- - - 1973-1979

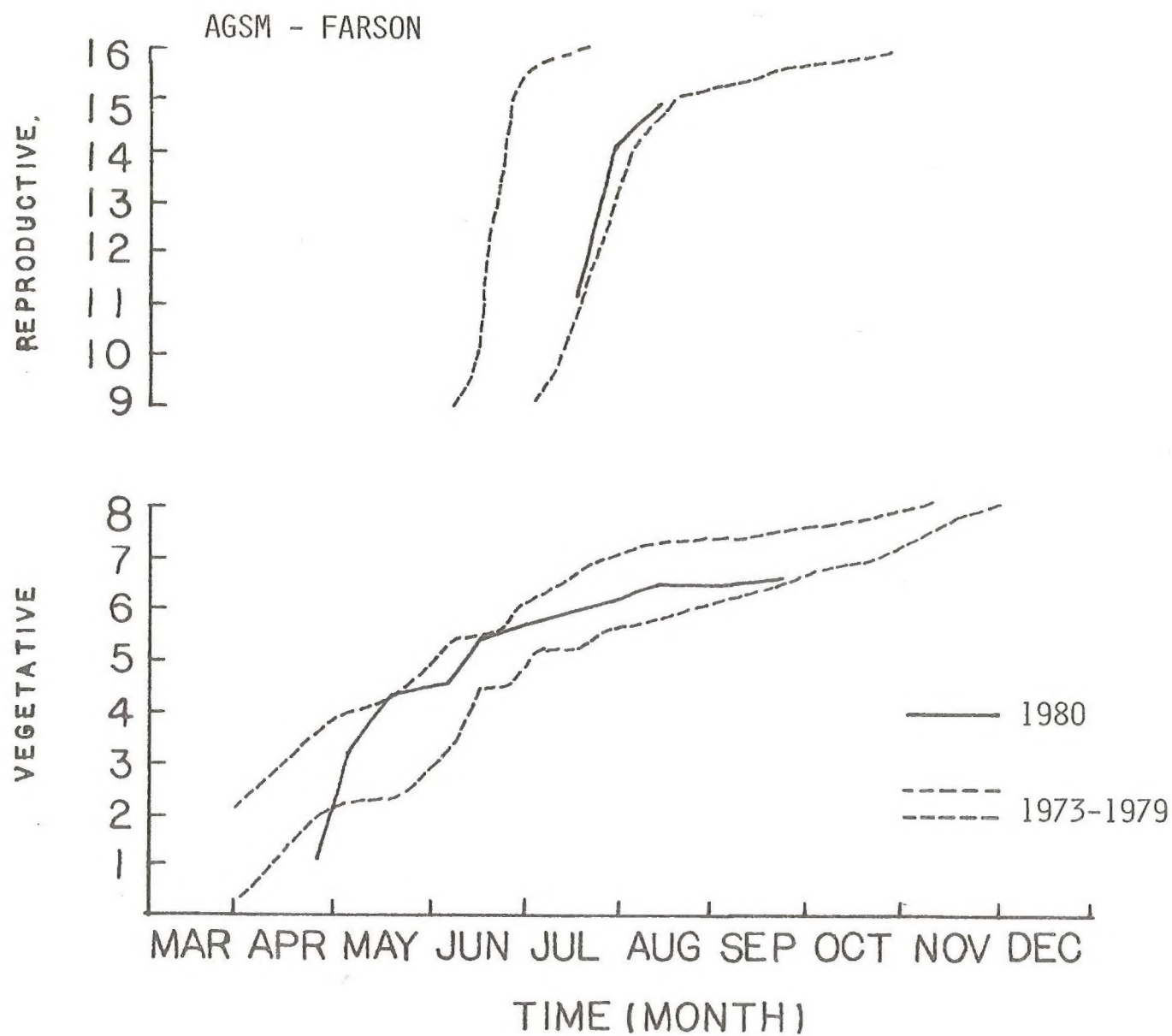
PHENOPHASE



PHENOPHASE



PHENOPHASE



PHENOPHASE

REPRODUCTIVE

16
15
14
13
12
11
10
9

AGSM - HORSECREEK

VEGETATIVE

8
7
6
5
4
3
2
1

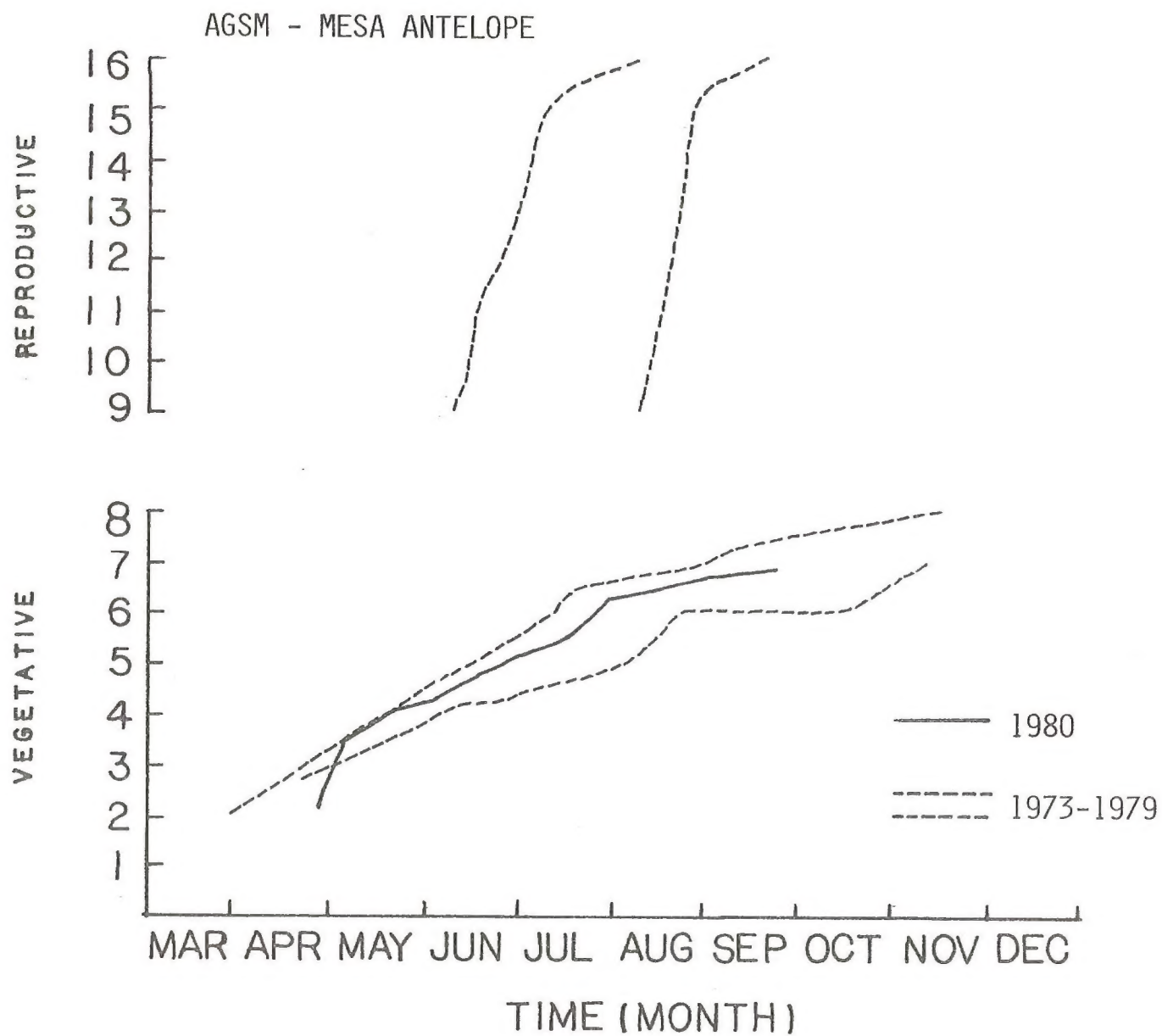
MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TIME (MONTH)

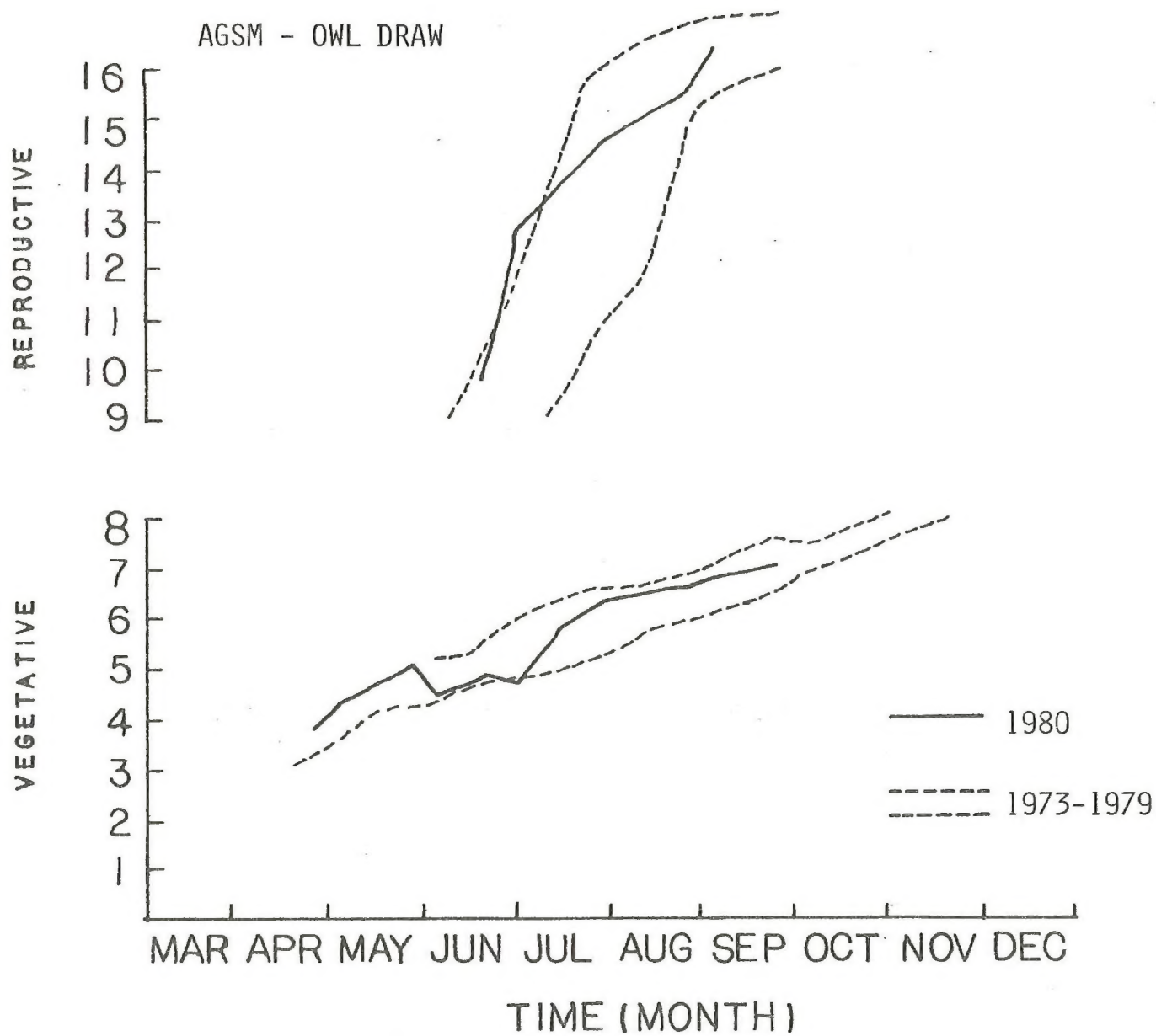
— 1980

- - - 1973-1979

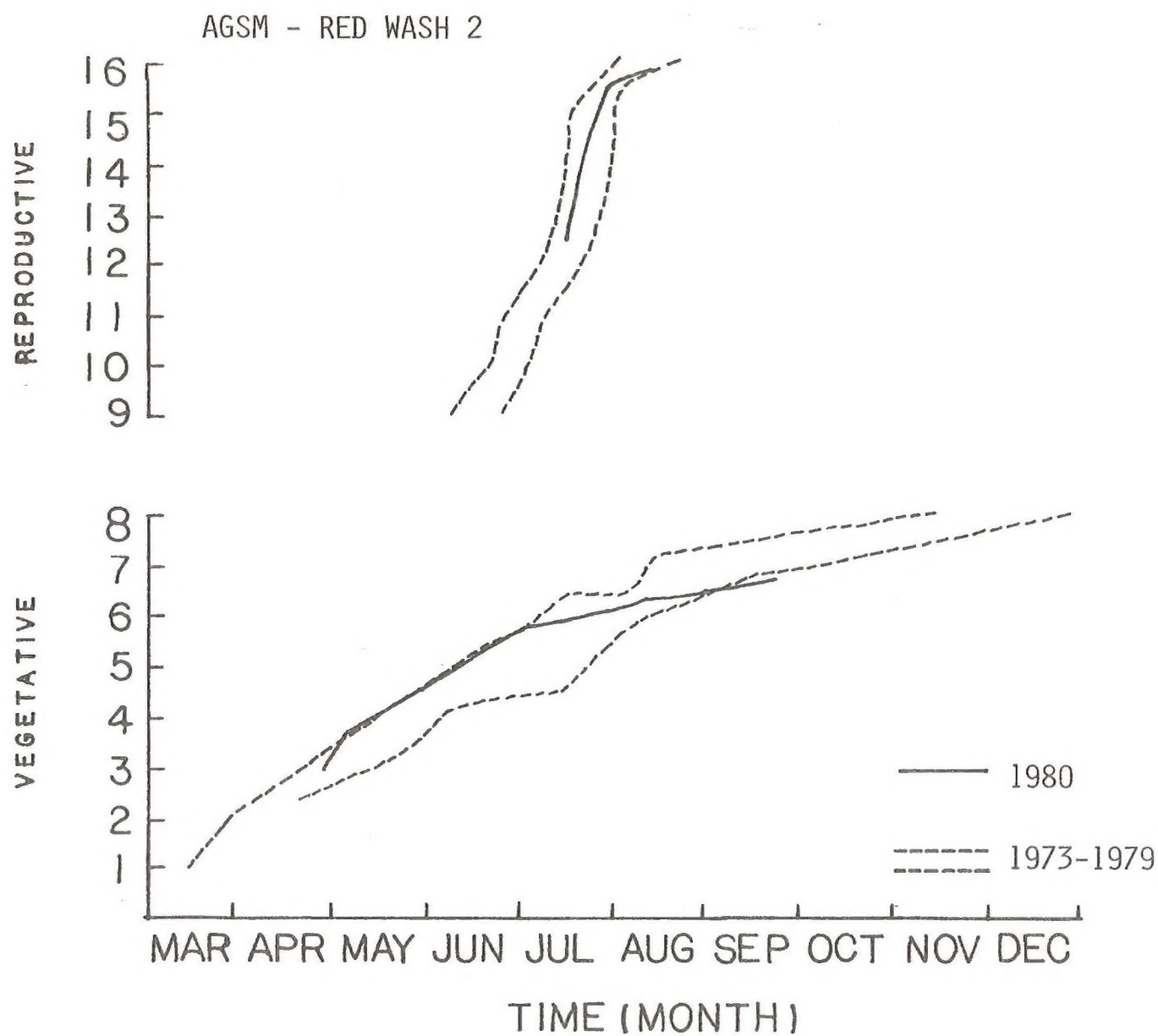
PHENOPHASE



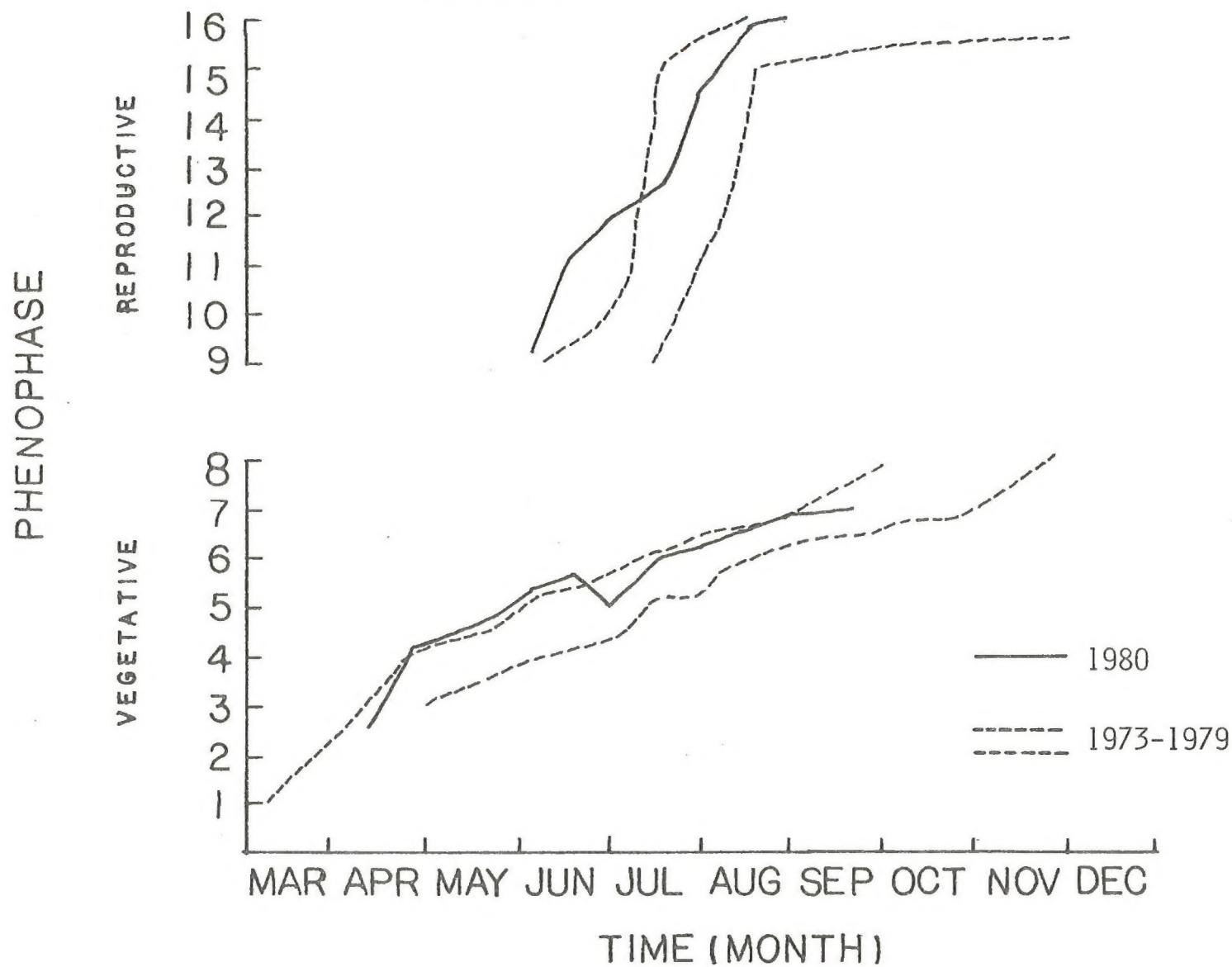
PHENOPHASE



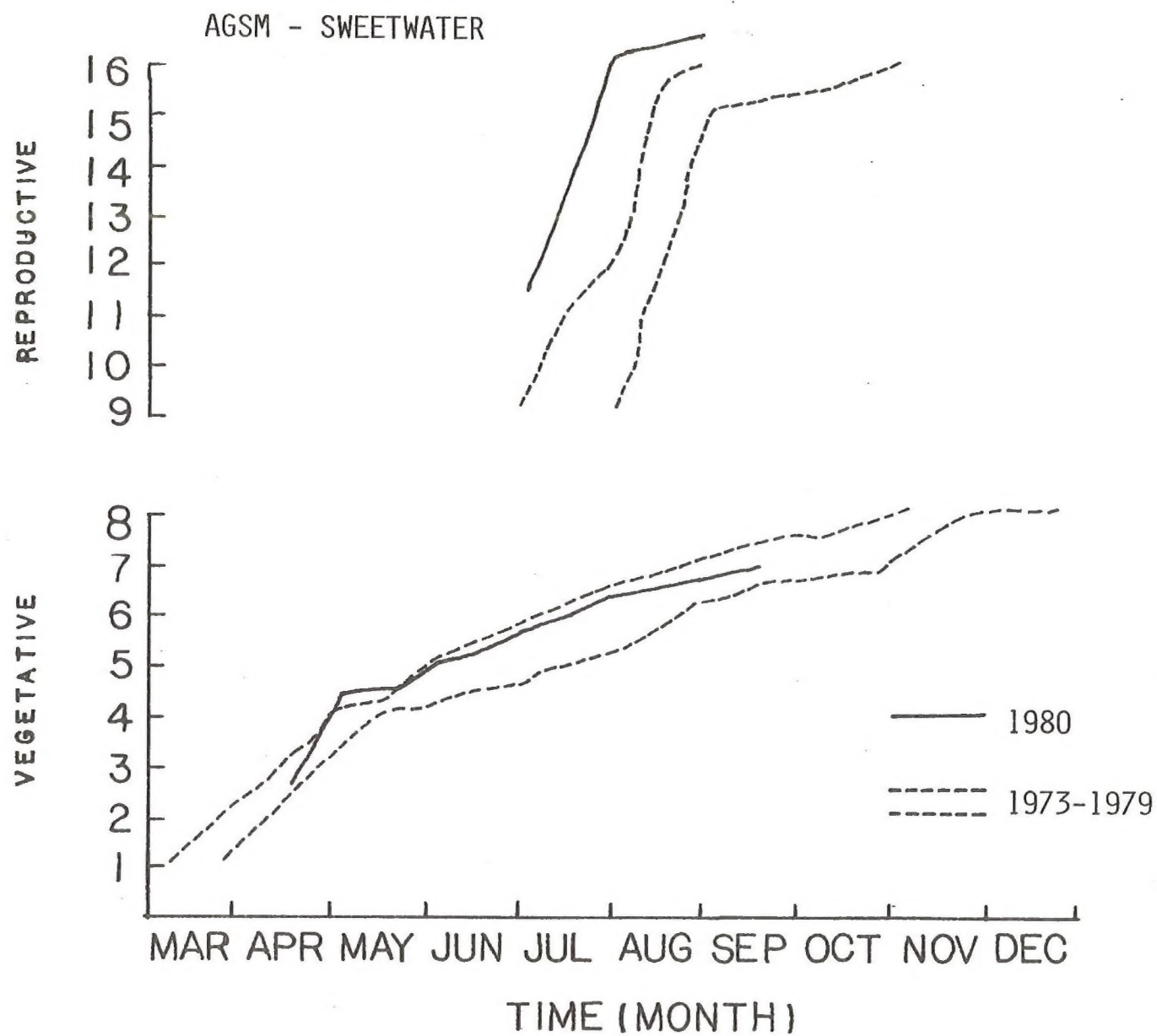
PHENOPHASE



AGSM - SHOSHONI 7



PHENOPHASE



PHENOPHASE

REPRODUCTIVE

16
15
14
13
12
11
10
9

VEGETATIVE

8
7
6
5
4
3
2
1

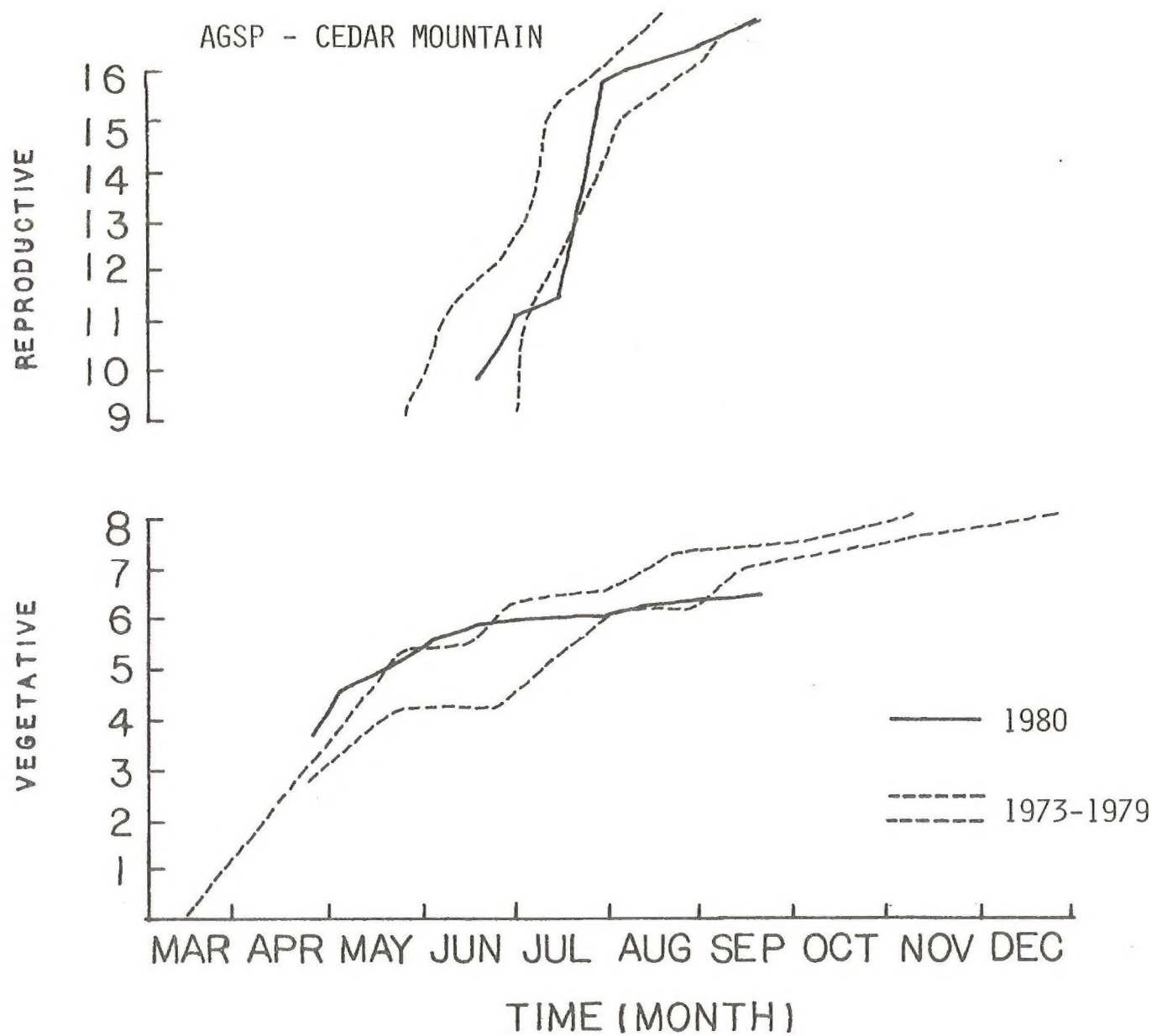
AGSM - UPPER GOVERNMENT

MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TIME (MONTH)

— 1980
- - - 1973-1979

PHENOPHASE



PHENOPHASE

REPRODUCTIVE

16
15
14
13
12
11
10
9

AGSP - CUMBERLAND 3

VEGETATIVE

8
7
6
5
4
3
2
1

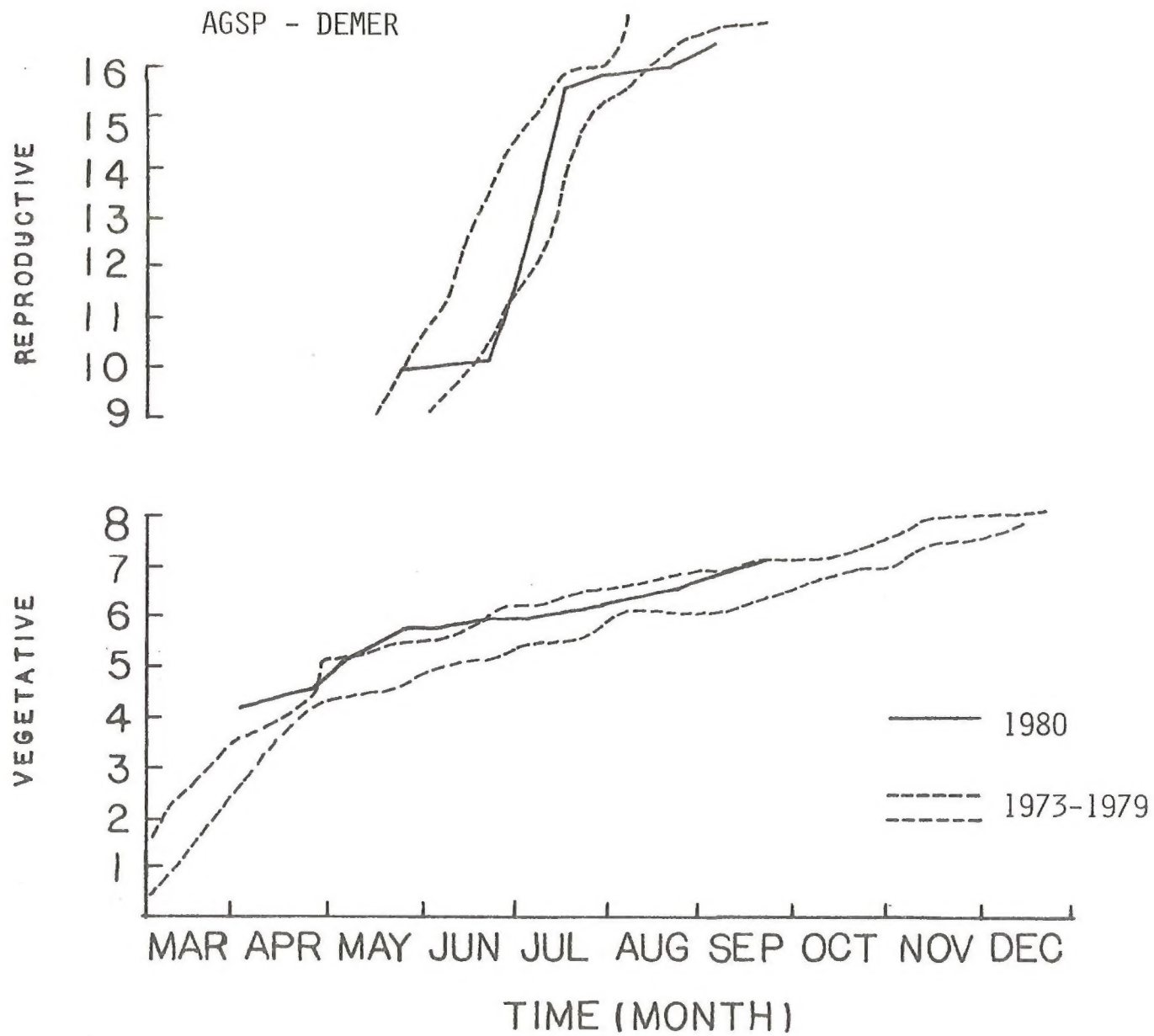
MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TIME (MONTH)

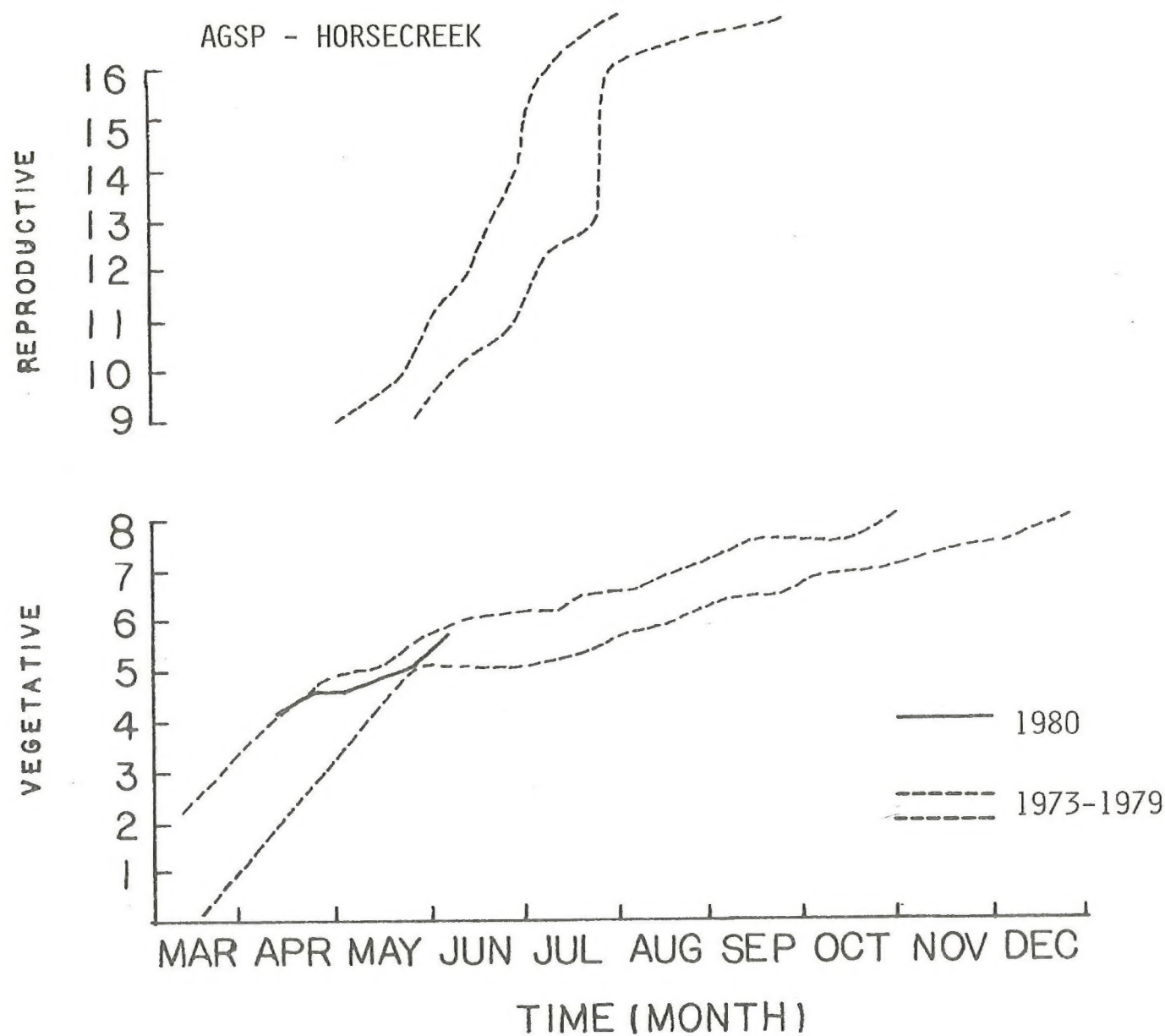
— 1980

- - - 1973-1979

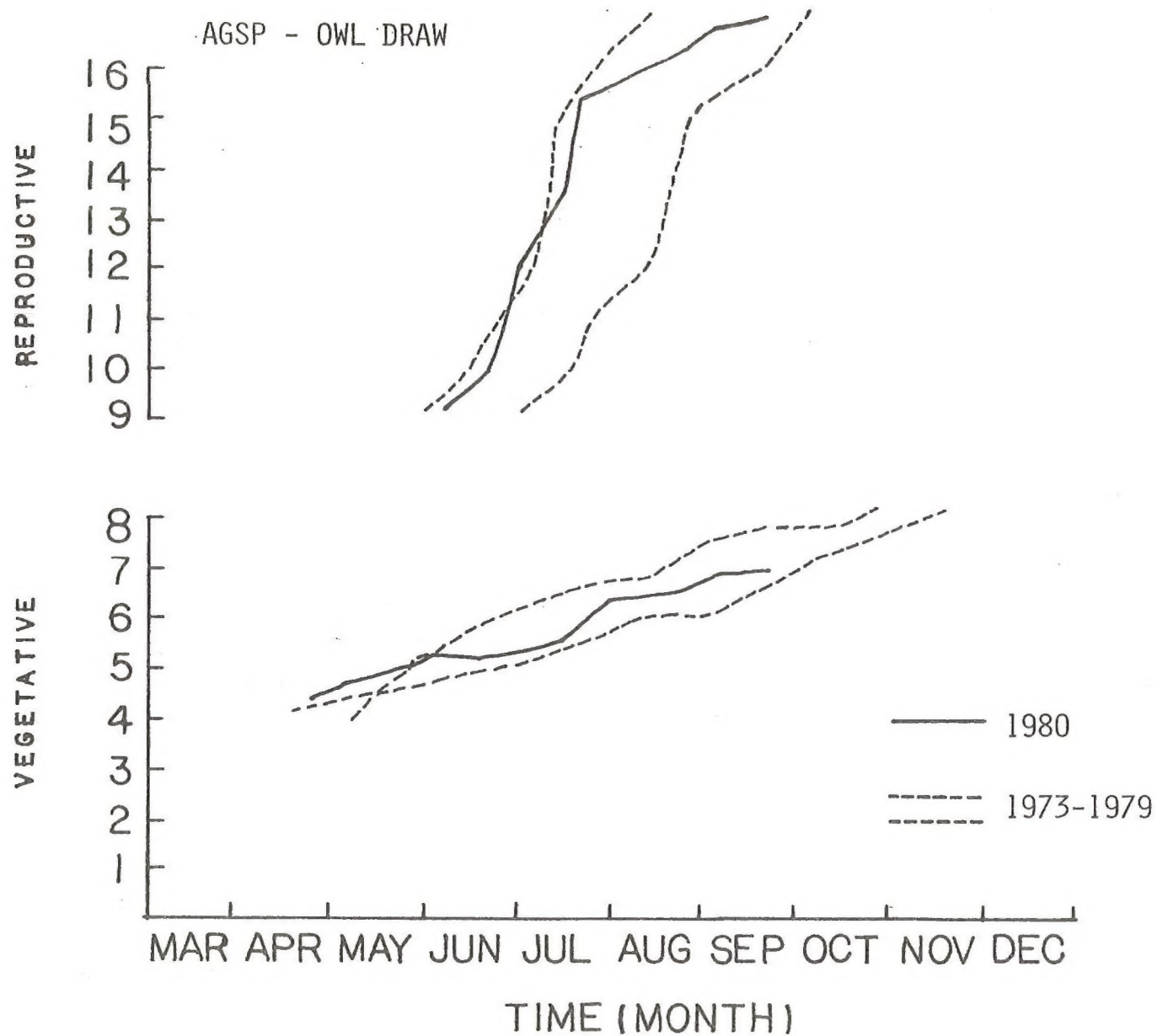
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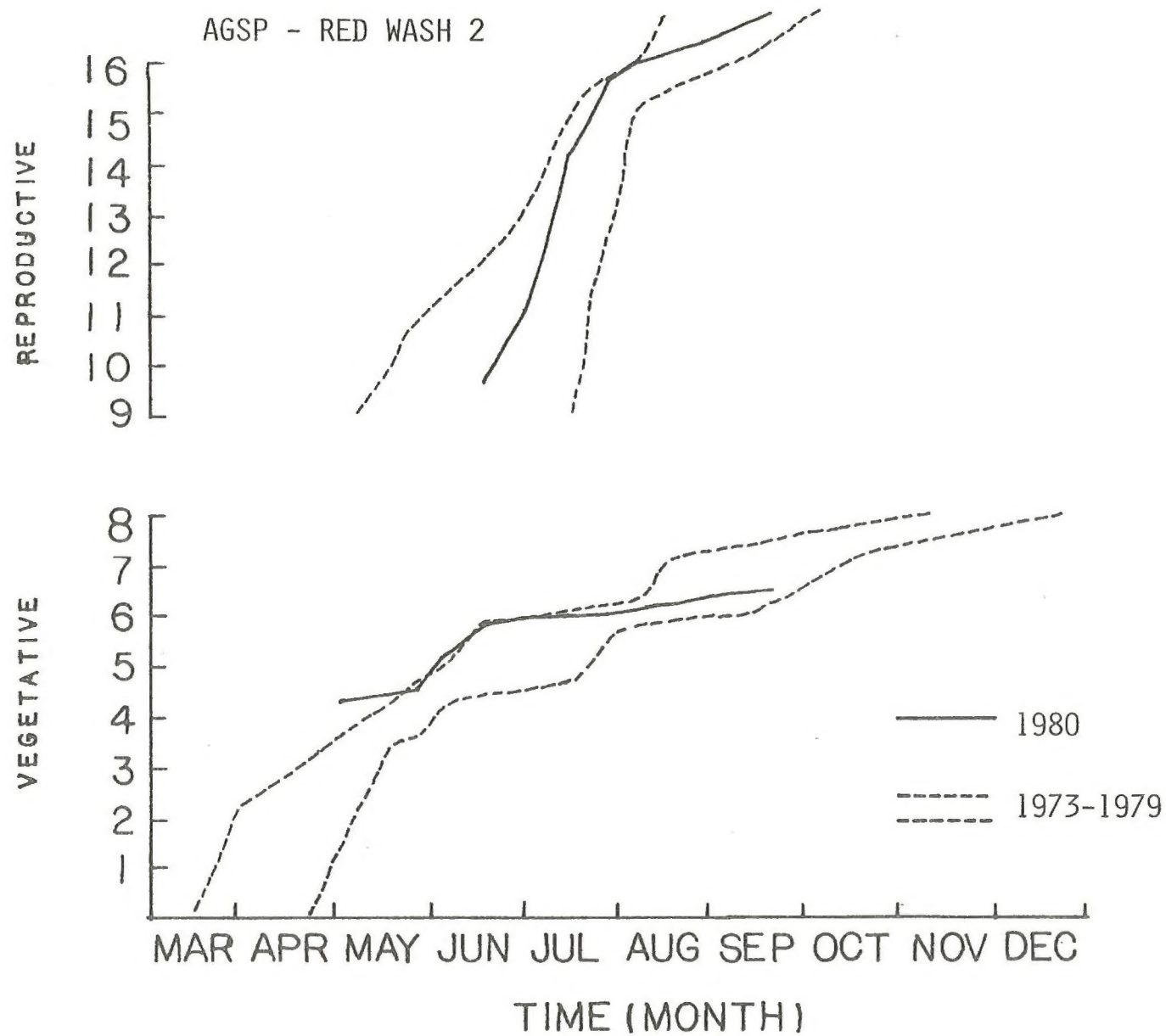
PHENOPHASE



PHENOPHASE



PHENOPHASE



PHENOPHASE

REPRODUCTIVE

16
15
14
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12
11
10
9

VEGETATIVE

8
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5
4
3
2
1

ARNO - HORSECREEK

MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TIME (MONTH)

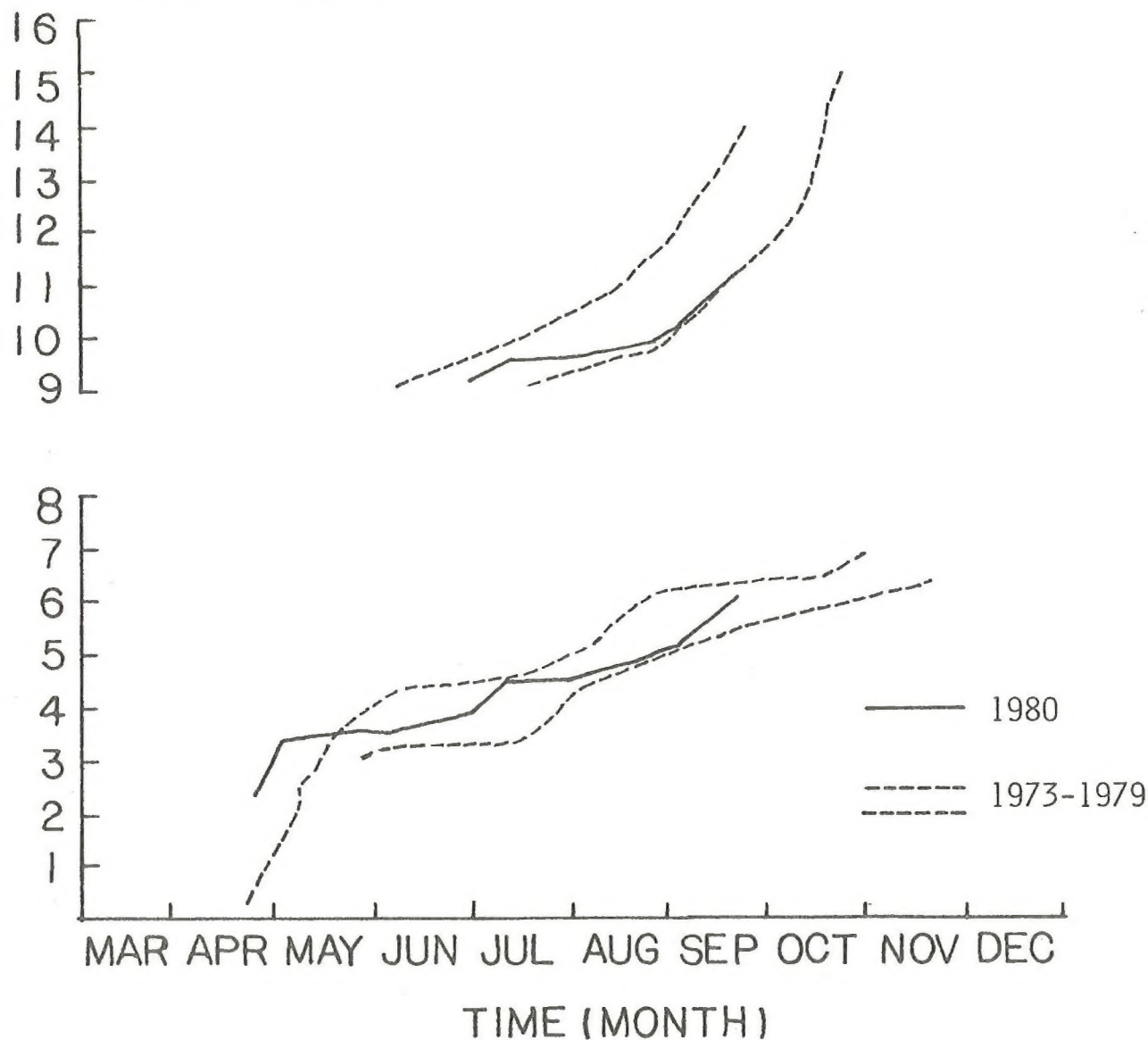
— 1980
--- 1973-1979

PHENOPHASE

REPRODUCTIVE

VEGETATIVE

ARNO - OWL DRAW



PHENOPHASE

REPRODUCTIVE

16
15
14
13
12
11
10
9

VEGETATIVE

8
7
6
5
4
3
2
1

ARNO - SWEETWATER

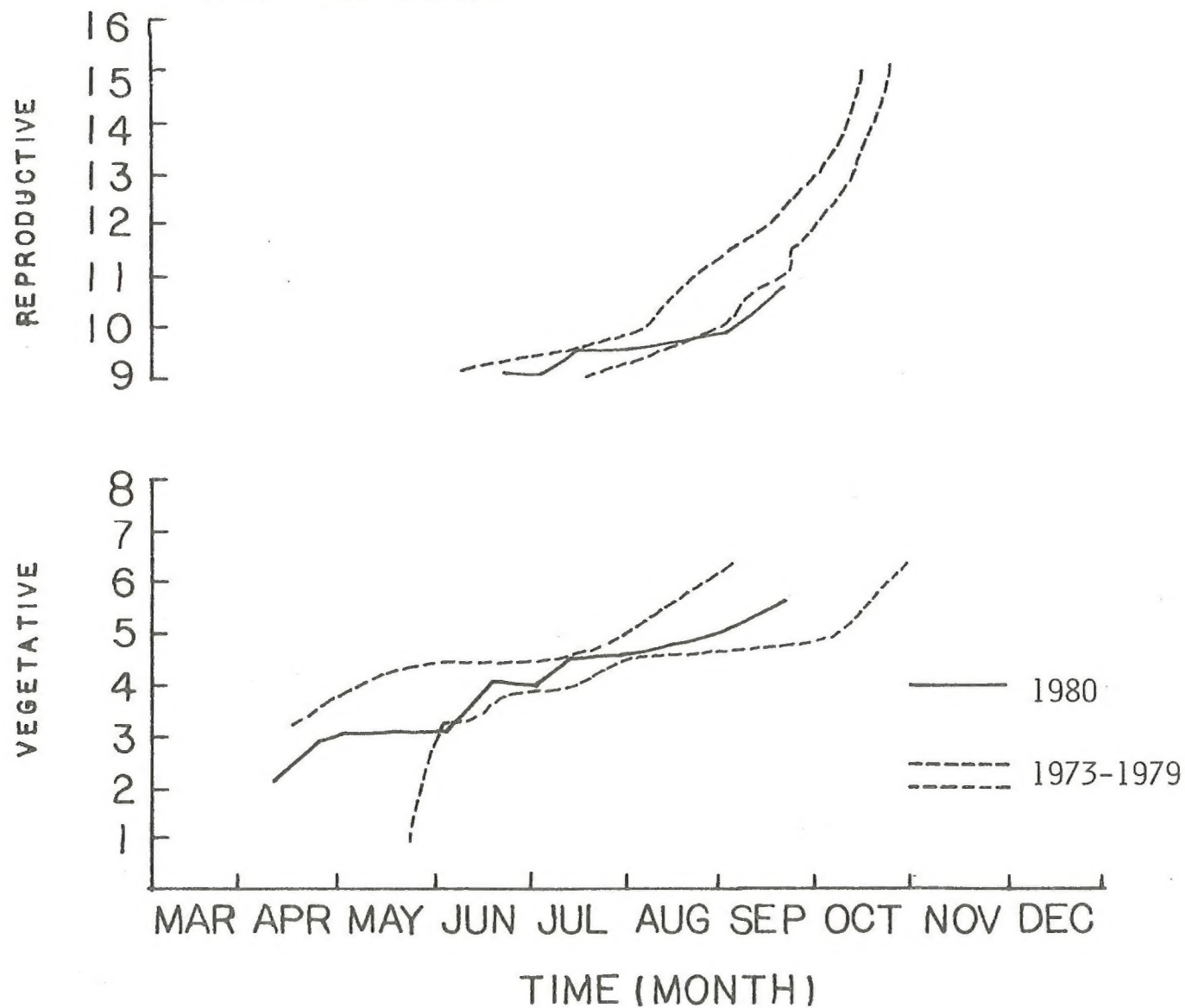
MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TIME (MONTH)

— 1980
- - - 1973-1979

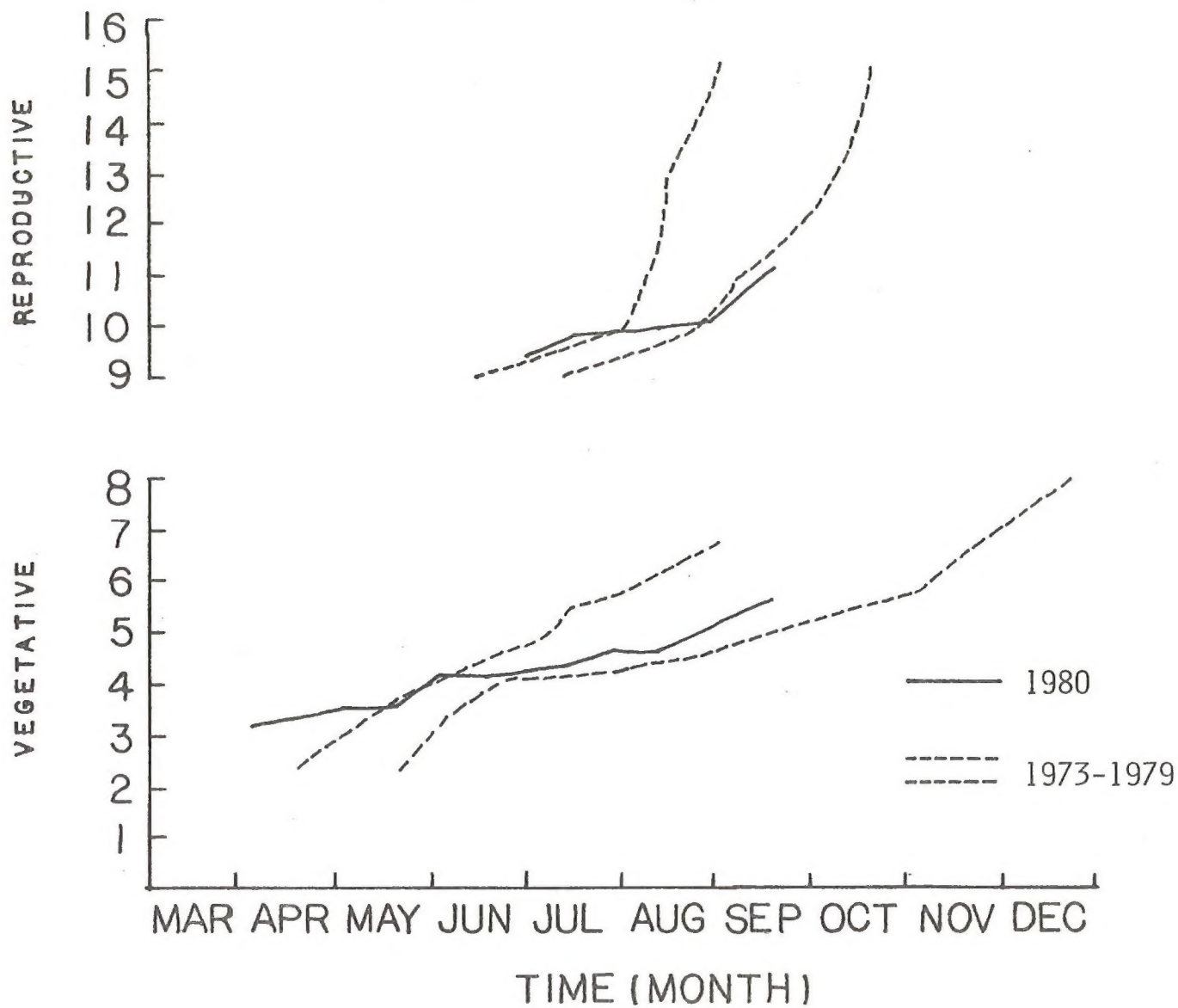
ARTR - BUD KIMBALL

PHENOPHASE



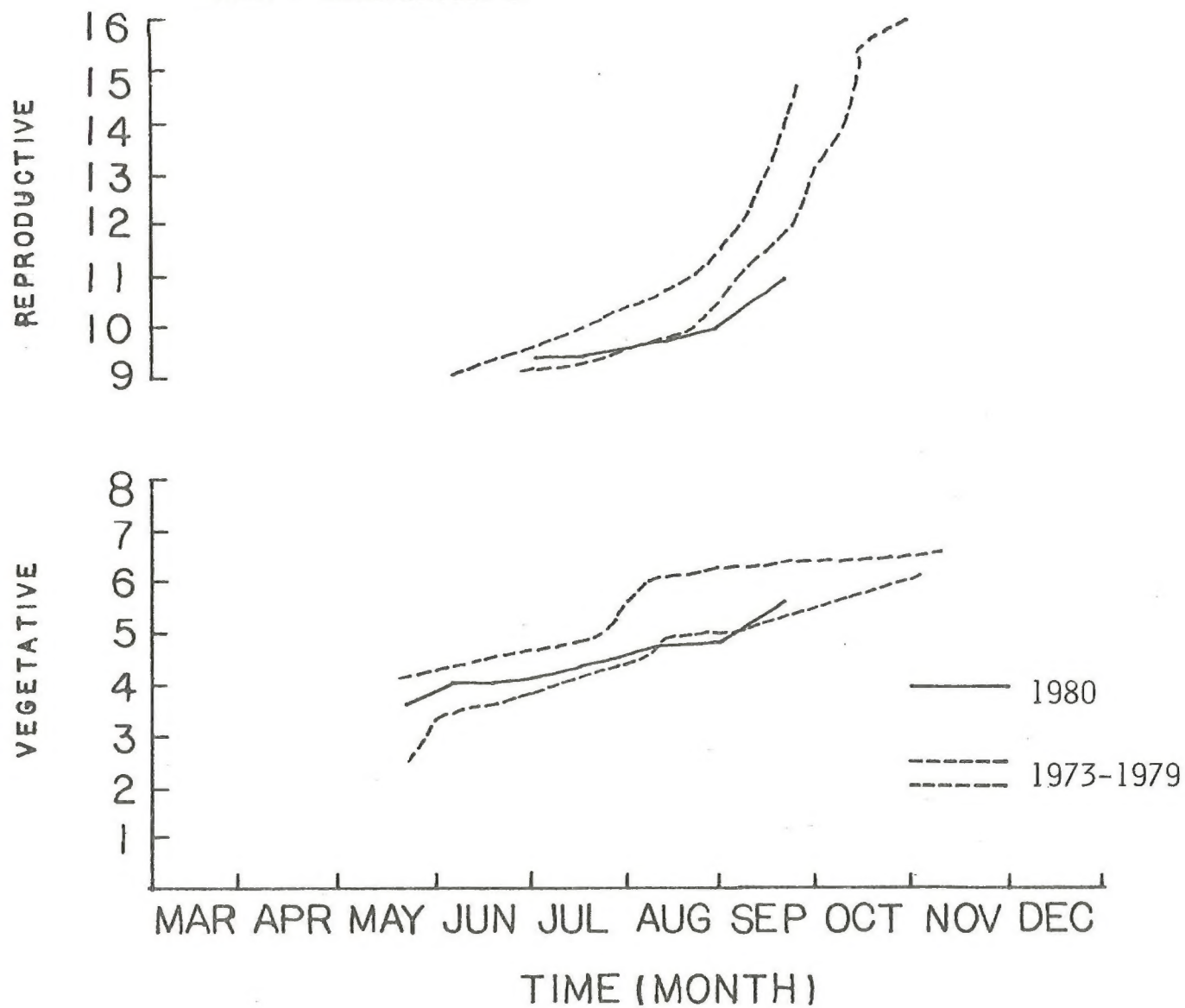
ARTR - CEDAR MOUNTAIN

PHENOPHASE

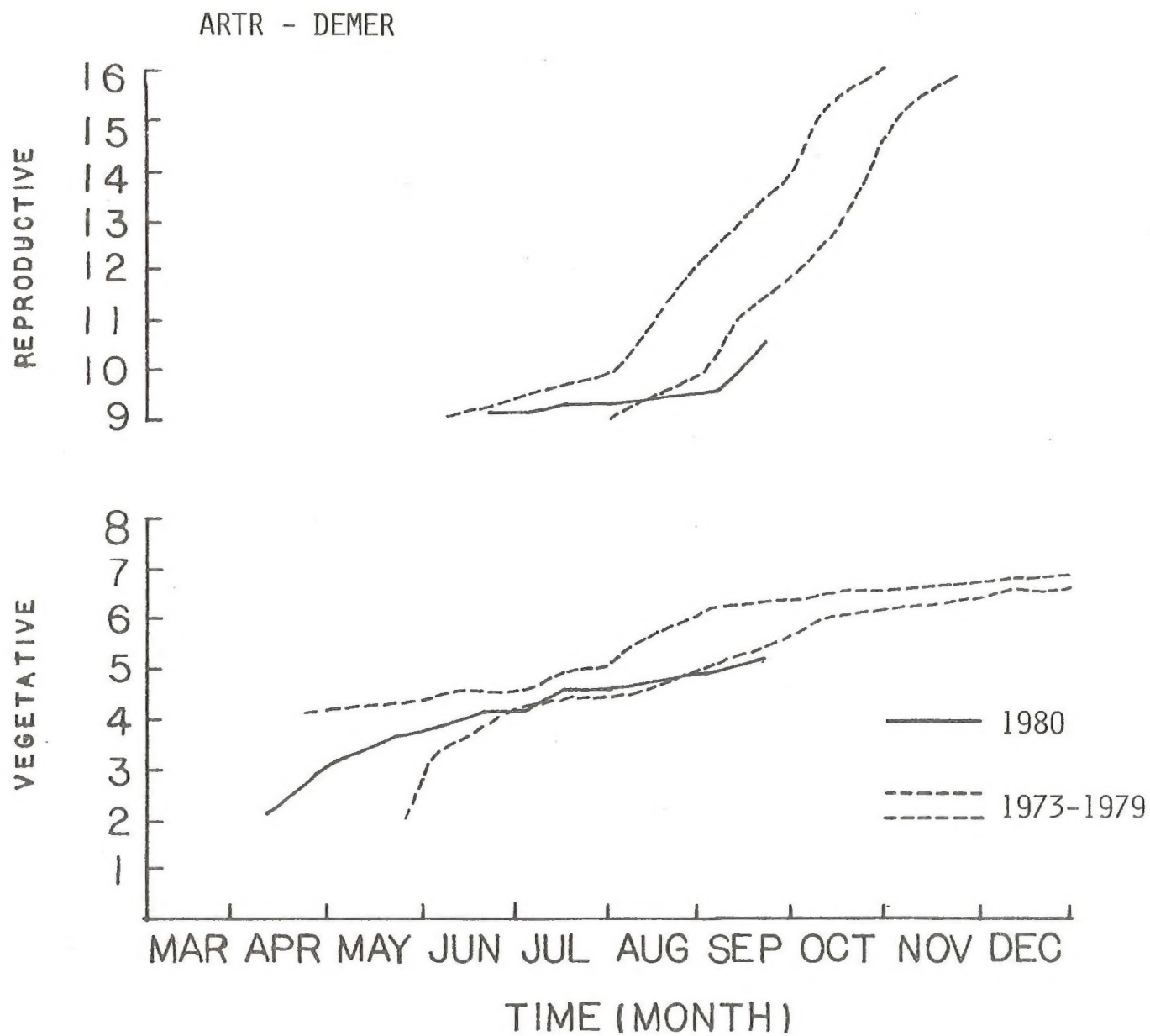


PHENOPHASE

ARTR - CUMBERLAND 3

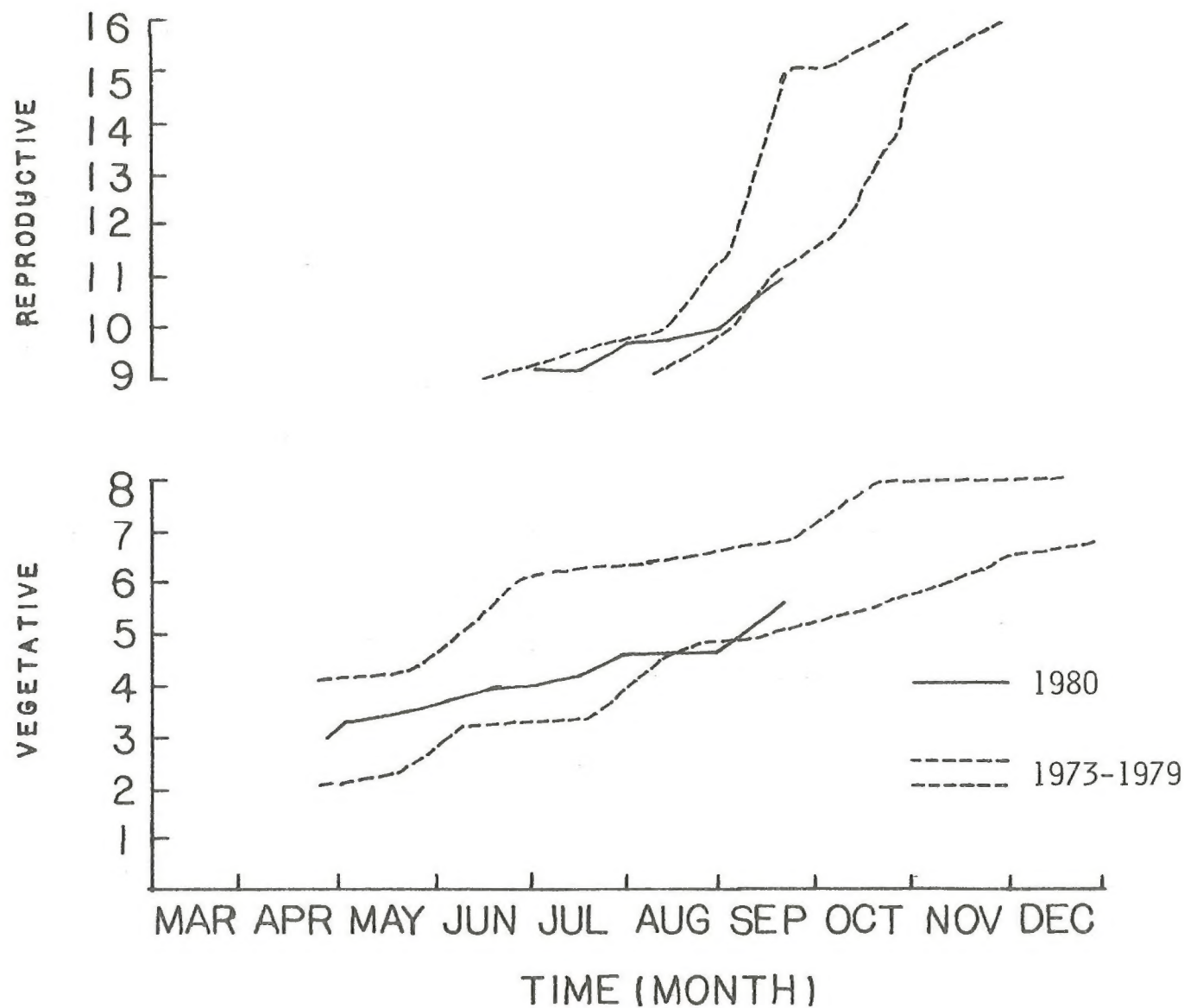


PHENOPHASE



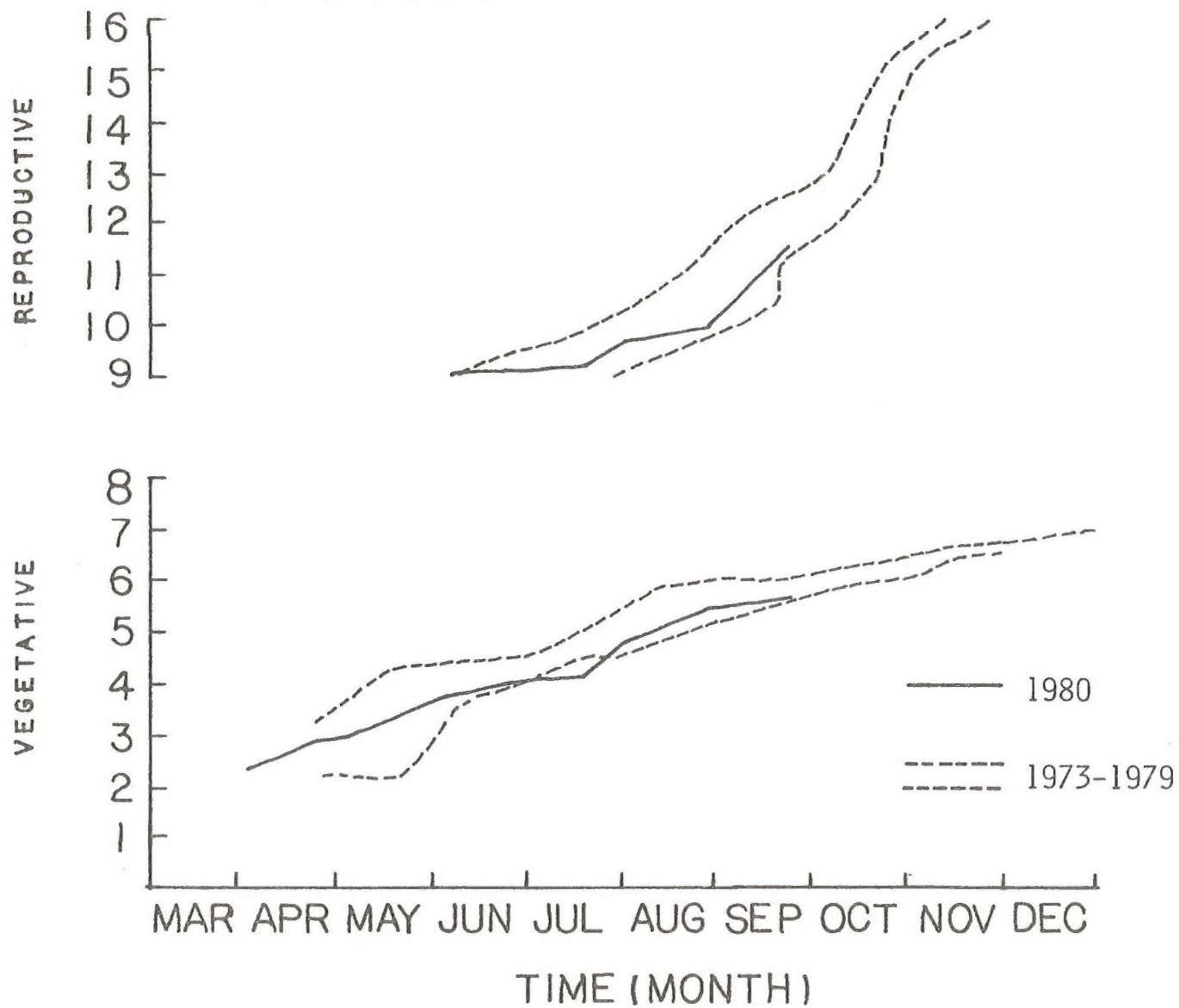
PHENOPHASE

ARTR - FARSON



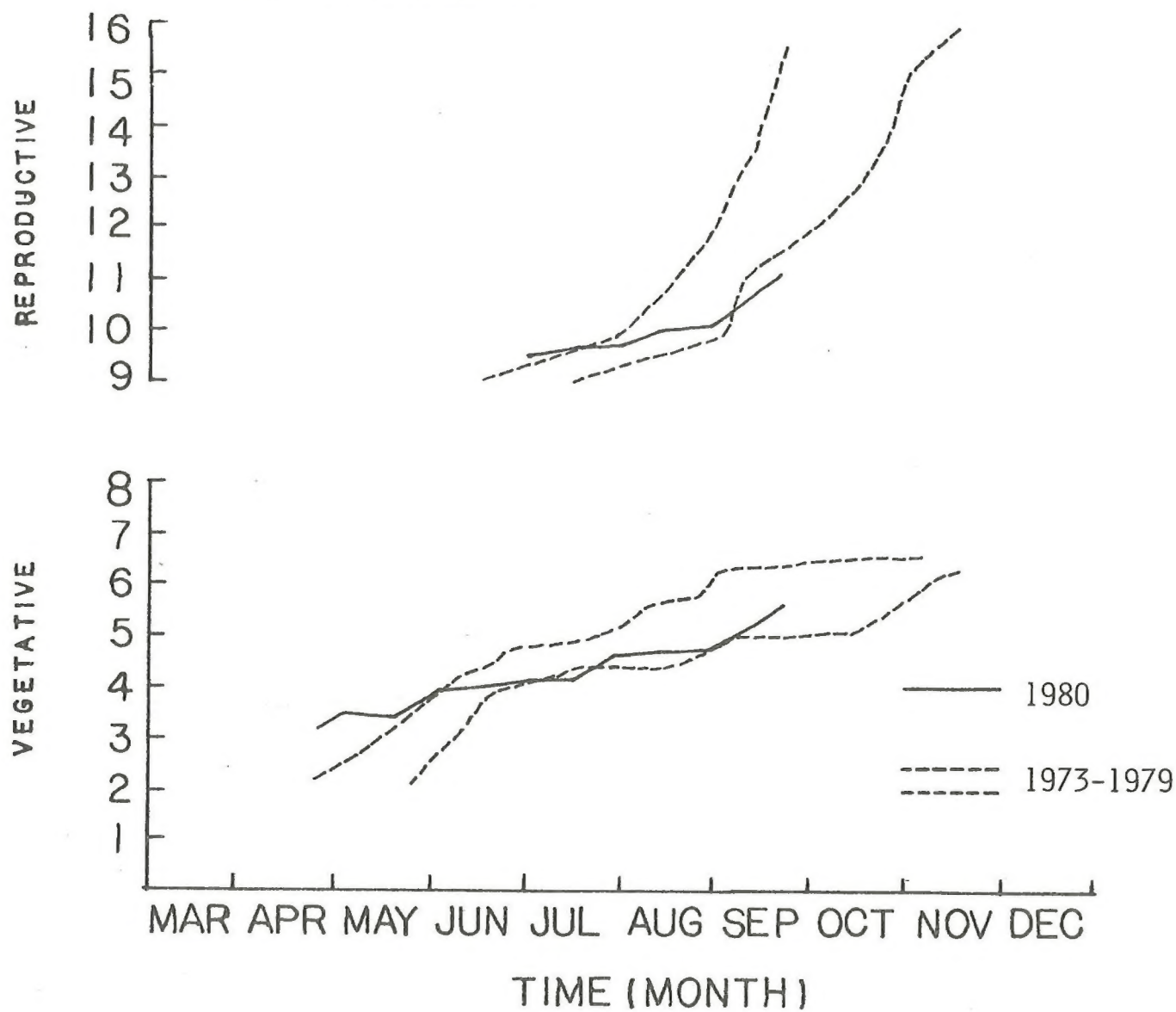
PHENOPHASE

ARTR - HORSECREEK



ARTR - MESA ANTELOPE

PHENOPHASE



PHENOPHASE

REPRODUCTIVE

16
15
14
13
12
11
10
9

VEGETATIVE

8
7
6
5
4
3
2
1

ARTR - OWL DRAW

MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TIME (MONTH)

— 1980
--- 1973-1979

ARTR - RED WASH 2

PHENOPHASE

REPRODUCTIVE

VEGETATIVE

16
15
14
13
12
11
10
9

8
7
6
5
4
3
2
1

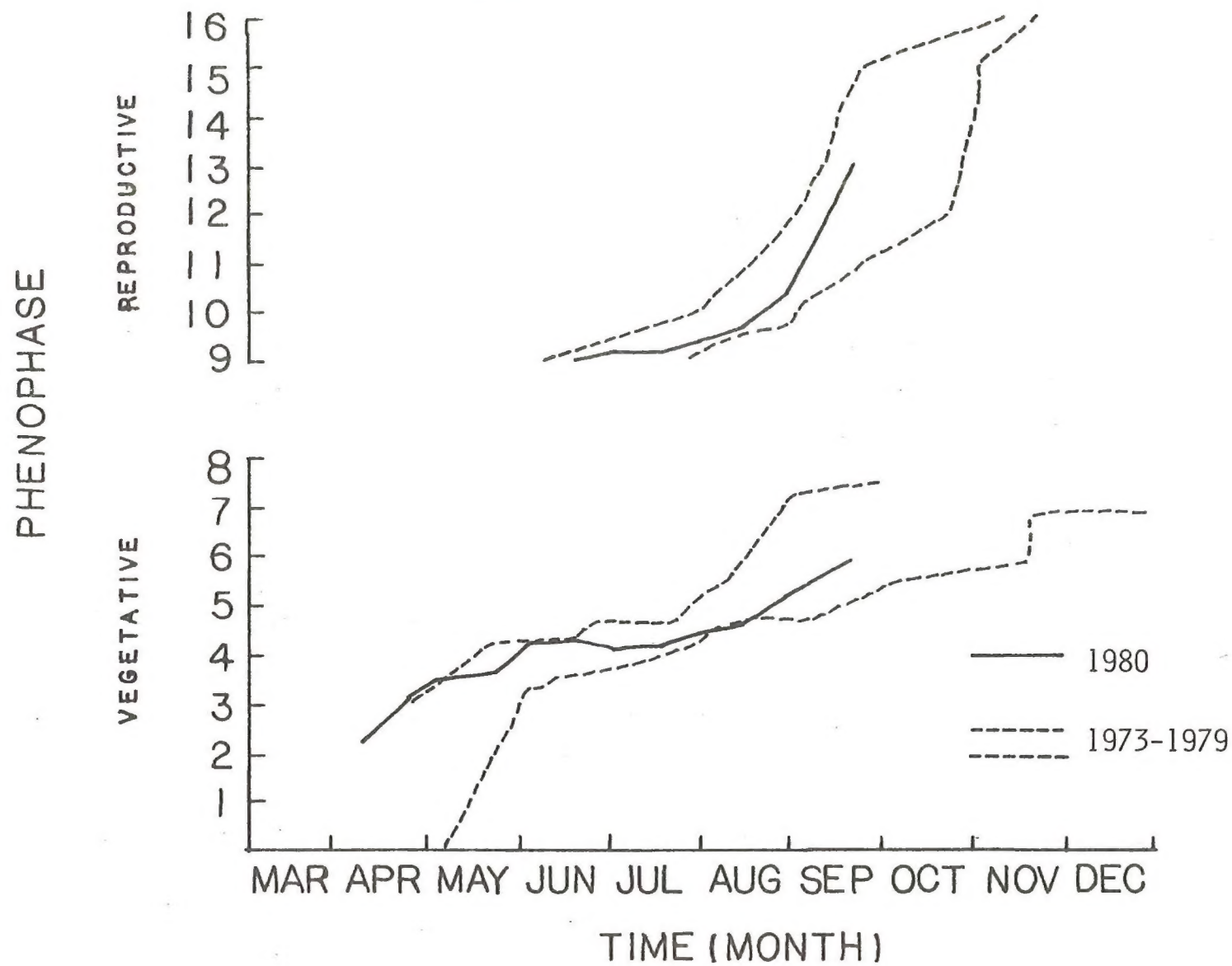
MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TIME (MONTH)

— 1980

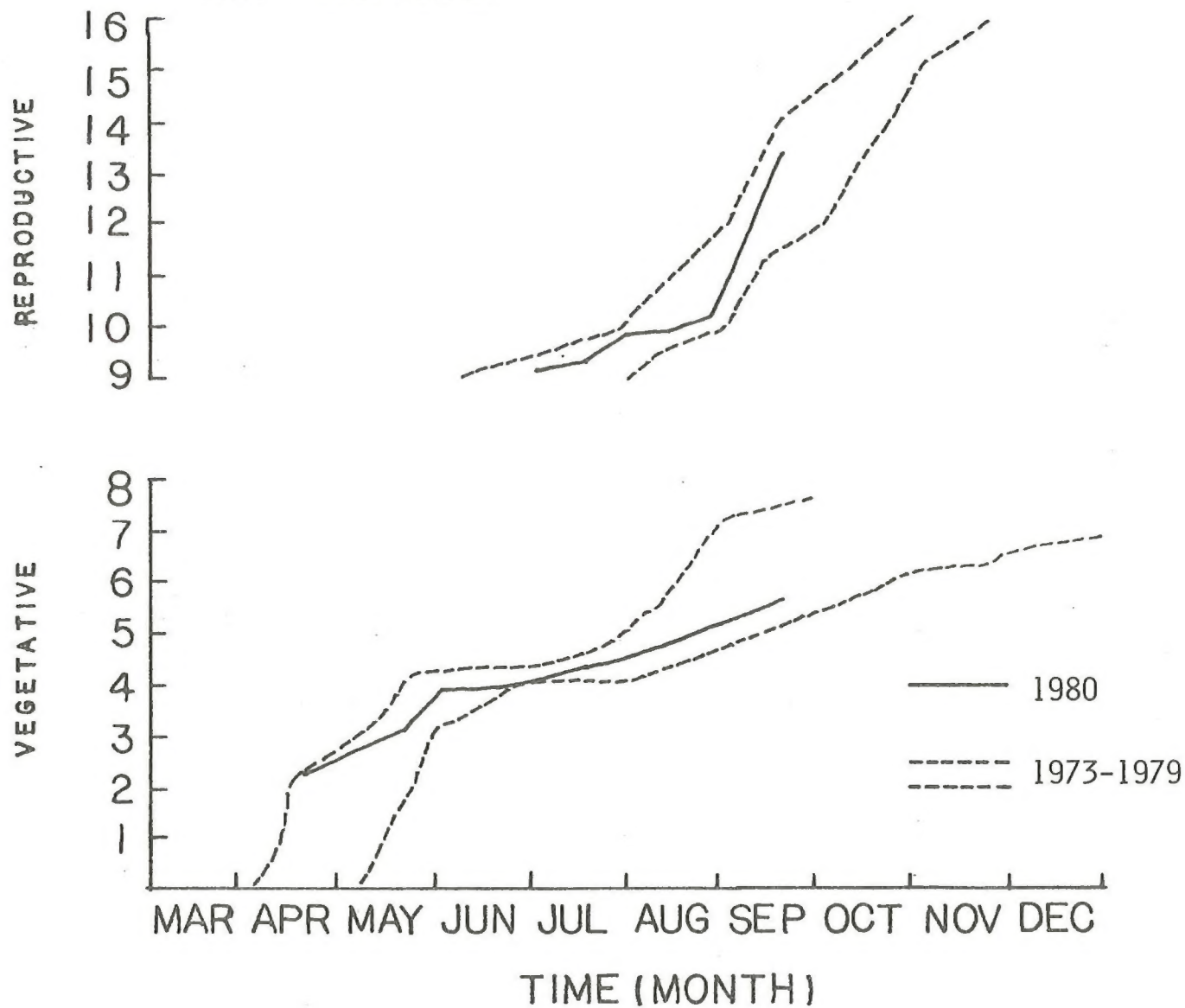
- - - 1973-1979

ARTR - SHOSHONI 7



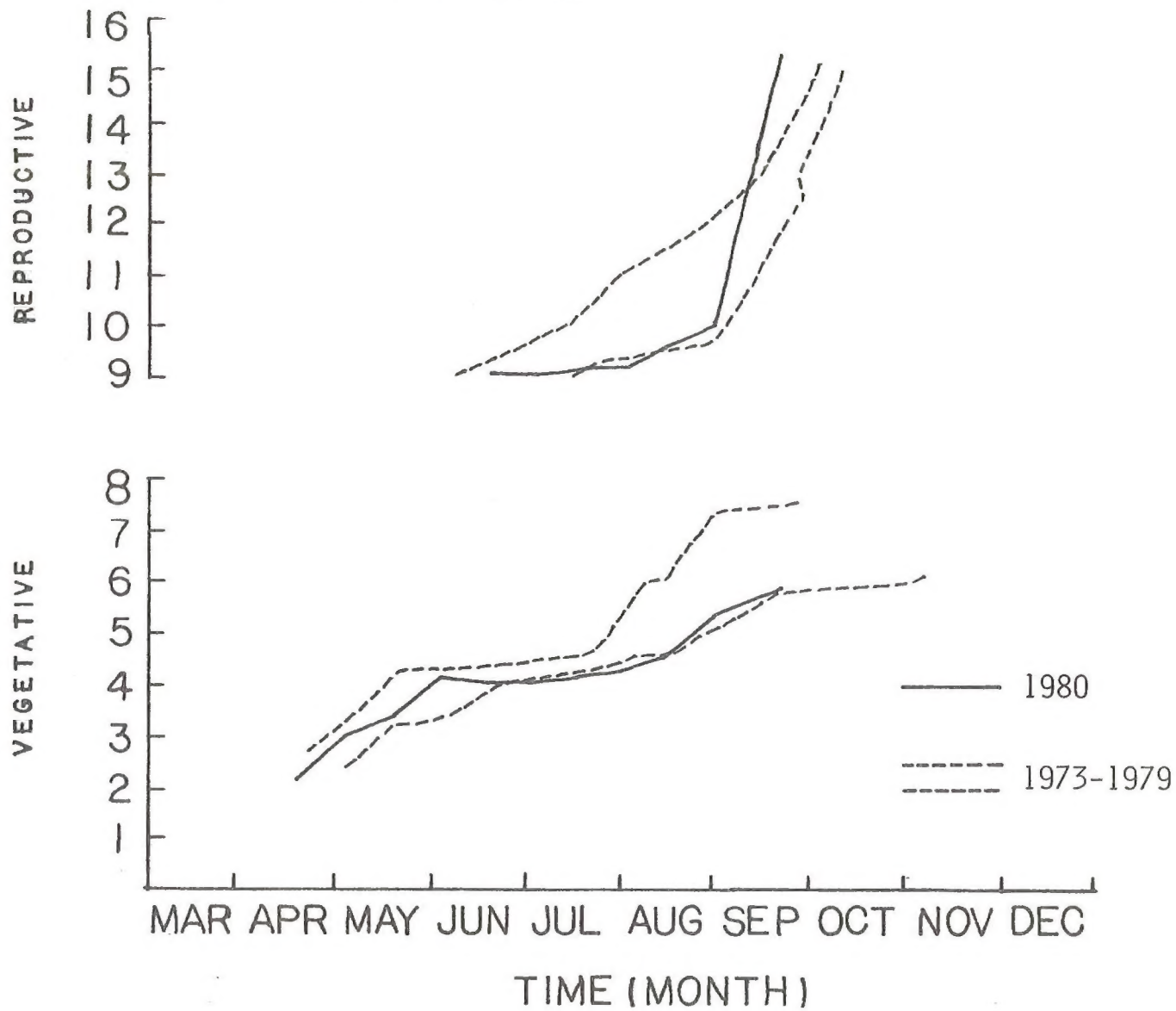
PHENOPHASE

ARTR - SWEETWATER



PHENOPHASE

ARTR - UPPER GOVERNMENT



SECTION II

Multiple Linear Regression for Predictive Modeling

Introduction

A multiple linear regression model was used to analyze the vegetative and reproductive phenological data. The purpose of the analysis was to establish causal relationships between environmental factors and phenodynamics. Two grass species, Agropyron smithii and A. spicatum, and two shrub species, Artemisia nova and A. tridentata, were analyzed.

The Hocking-LaMotte-Leslie method of multiple regression analysis was implemented for the current report. This method is a backward selection process as opposed to the previously used forward selection process. A backward selection process was deemed superior to the forward selection process for this data set. In the forward selection models the most significant variable is entered into the model first. Partial correlation coefficients are then calculated and the next most significant variable, given that the first variable is already in the model, is entered. Partial correlations are then recalculated and the process continues. This procedure poses the possibility of entering one significant variable while two other variables when combined may be more significant. The model then deviates from the optimum model. The backward selection process eliminates this problem by starting with the full model of independent variables and deleting the non-significant variables. The alternate pathways are then not possible. The backward selection process begins by entering all of the independent variables into a selection pool. Any size subset of variables from the selection pool can then be specified and the optimum regressions for those subsets calculated. The calculation is then used to determine the optimum

regression, based on the minimum mean square error. Partial correlation coefficients for the full model and the specified subset are calculated for tests of significance.

A simple t-test is calculated to determine significant variables. The least significant variables are eliminated from the regression to establish the desired subset size. An analysis of variance is then determined and the model is tested for significance. Variables with the partial correlation coefficients are included in the model until the optimum mean square error is determined. A multiple correlation coefficient is then computed and compared to the coefficient for other regressions. An evaluation of the t-value for regression coefficients, the F-value for the regression, and the multiple regression coefficient will yield the optimum predictive model.

The regression model is expressed in terms of independent variables and their effect on a dependent or response variable. The model takes the form:

$$Y = B_0 + B_1X_{i1} + B_2X_{i2} + B_3X_{i3} + \dots + B_nX_{in} + e_i$$

The Y is the response variable that is defined by the right side of the equation. In this report the response variables are the vegetative and reproductive phenological stages. The B_0 is the Y-axis intercept of the optimum regression and is of little interpretive value in an ecological sense. The coefficients B_i demonstrate the positive or negative dependence and the magnitude of that relationship to Y according to the influence of the other independent variables. A negative coefficient denotes an accelerated plant development. The X_i variables are the environmental and biotic factors listed in Table 1. When the B_i coefficients are combined with the X_i values an estimate of Y can be obtained.

The multiple correlation coefficient and the standard error of the regression will determine the accuracy of that estimate.

The analyses for vegetative and reproductive phenodynamics for each of the four species are listed in following sections.

TABLE I. Independent and dependent variables used in multiple regression analysis.

Variable No.	
1	Soil temperature at 38 cm depth on the sampling date (°C)
2	Soil moisture % at 0-15 cm depth on the sampling date
3	Soil moisture % at 15-30 cm depth on the sampling date
4	Soil moisture % at 46-61 cm depth on the sampling date
5	Soil moisture % at 0-15 cm depth on the previous sampling date
6	Soil moisture % at 15-30 cm depth on the previous sampling date
7	Soil moisture % at 46-61 cm depth on the previous sampling date
8	Annual precipitation total accumulation (mm)
9	Oct. 15-April 15 precipitation accumulation (mm)
10	April 15-July 1 precipitation accumulation (mm)
11	July 1-Sept. 1 precipitation accumulation (mm)
12	Sept. 1-Oct. 15 precipitation accumulation (mm)
13	Total forage production (kg/ha/yr)
14	Species forage production (kg/ha/yr)
15	Ambient air temperature on sampling date (°C)
16	Maximum air temperature since the previous sampling date (°C)
17	Minimum air temperature since the previous sampling date (°C)
18	Reproductive phenophase value
19	Vegetative phenophase value

ANALYSES FOR AGROPYRON SMITHII

Several modifications to the data structure were necessary to enable proper use of statistical analyses procedures. In order for a multiple regression to provide valid results the independent variables must not be highly correlated or a sum of other variables in the model. Therefore, the variables of total precipitation, total production and species production were eliminated from the selection pool. The total precipitation variable is an accumulation of the seasonal values so the correlation between the variables is high. The total production and species production values are also related to one another. The sample size for these values are also too small for adequate analysis. Only five exclosures were available for analysis and the use of five values through the phenology and environmental observations caused a high correlation between observations.

Reproductive Phenology. Two independent environmental variables were chosen from the selection pool of fifteen variables. The variables chosen and their significance levels are listed in Table II. The regression model calculated for this subset of variables is:

$$Y_{18} = 8.220 - .069X_5 + .042 X_{16}$$

where Y_{18} = reproductive phenology.

This regression model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated to be 3.79 (P .002). The seven independent variables accounted for only 4.86 percent of the variability of the reproductive phenology. This value is an adjusted multiple correlation coefficient for the number of variables present in the model. The low coefficient is due to the general lack of reproduction of western wheatgrass during 1979. Environmental variables

changed throughout the growing season but reproductive phenophase remained in winter dormancy. Independent variables changed while the dependent variable was constant, which resulted in a low multiple correlation.

The variable which promoted phenologic development was the maximum air temperature since the previous sampling date (X_{16}). Soil moisture at 0-15 cm on the previous sampling date (X_5) prolonged phenologic development.

Table II. Descriptions and significances of independent variables used in the analysis of reproductive phenology of Agropyron smithii.

Variable	Description	T-value	Significance
5	Soil moisture % at 0-15 cm depth on the previous sampling date	-2.01	.047
16	Maximum air temperature since the previous sampling date ($^{\circ}\text{C}$)	1.65	.101

Vegetative Phenology. Nine independent environmental variables were selected from a possible fourteen variables to supply the best regression model. The variables chosen and their significance levels are listed in Table III. The regression model calculated is listed below:

$$Y_{19} = 3.968 + .079X_1 - .026X_3 - .024X_6 + .095X_8 - .33X_{10} - .157X_{12} \\ - .027X_{15} + .034X_{16} + .048X_{17}$$

where Y_{19} = vegetative phenology.

The regression model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated as 21.41 (P .0001). The independent variables present in the model accounted for 62.76 percent of the vegetative phenology variability.

Four variables promoted the vegetative phenologic development. They were soil temperature at 38 cm depth on the sampling date (X_1), total annual precipitation accumulation (X_8), maximum air temperature since the previous sampling date (X_{16}), and minimum air temperature since the previous sampling date (X_{17}). Five factors prolonged the vegetative development. There were soil moisture percent at 15-30 cm depth on the sampling date (X_3), soil moisture percent at 15-30 cm depth on the previous sampling date (X_5), July 1 - September 1 precipitation accumulation (X_{11}), September 1 - October 15 precipitation accumulation (X_{12}), and ambient air temperature on the sampling date (X_{15}).

Table III. Description and significances of independent variables used in the analysis of vegetative phenology of Agropyron smithii.

Variable	Description	T-value	Significance
1	Soil temperature at 38 cm depth on the sampling date ($^{\circ}\text{C}$)	4.43	.001
3	Soil moisture % at 15-30 cm depth on the sampling date	-1.31	.194
6	Soil moisture % at 15-30 cm depth on the previous sampling date	-1.62	.109
8	Total annual precipitation accumulation (mm)	2.47	.015
11	July 1 - September 1 precipitation accumulation (mm)	-1.74	.086
12	September 1 - October 15 precipitation accumulation (mm)	-2.93	.004
15	Ambient air temperature on the sampling date ($^{\circ}\text{C}$)	-2.26	.026
16	Maximum air temperature since the previous sampling date ($^{\circ}\text{C}$)	2.64	.010
17	Minimum air temperature since the previous sampling date ($^{\circ}\text{C}$)	3.37	.001

ANALYSES FOR AGROPYRON SPICATUM

Fourteen of the seventeen independent variables were entered into the selection pool. The remaining three variables were eliminated due to the multi-colinearity between the variables. The variables eliminated from the regression were total and species production values and total precipitation. The high correlation between these values was due to the rarity of exclosures containing this species.

Reproductive Phenology. Seven independent environmental variables were chosen from the selection pool of eleven variables. The variables chosen and their significance levels are listed in Table IV. The regression model calculated for this subset of variables is:

$$Y_{18} = 12.428 - .119X_3 - .233X_4 + .175X_5 - .226X_7 + .397X_8 - 3.53X_{10} + .163X_{15}$$

where Y_{18} = reproductive phenology.

This regression model was highly significant when tested by analysis of variance procedures. The F-statistic 16.35 and the probability associated with the F- statistic was less than .0001. The seven independent variables accounted for 66.14 percent of the variability of the reproductive phenology. This value represents an adjusted multiple correlation coefficient that has accounted for the number of variables present in the model.

Variables which promoted phenologic development were soil moisture percent at 0-15 cm on the previous sampling date (X_{15}), total annual precipitation accumulation (X_8), and ambient air temperature on the sampling date (X_5). The other variables prolonged or slowed the plant phenologic development. They were the soil moisture percent at 15-30 cm depth on the sampling date (X_3), the soil moisture percent at 46-60 cm

depth on the sampling date (X_4), soil moisture percent at 46-60 cm on the previous sampling date (X_7), and spring precipitation accumulation (X_{16}).

Table IV. Description and significances of independent variables used in the analysis of reproductive phenology of Agropyron spicatum.

Variable	Description	T-value	Significance
3	Soil moisture % at 15-30 cm depth on the sampling date	-.124	.200
4	Soil moisture % at 46-60 cm depth on the sampling date	-3.34	.002
5	Soil moisture % at 0-15 cm depth on the previous sampling date	1.94	.058
7	Soil moisture % at 46-60 cm depth on the previous sampling date	-3.49	.001
8	Annual total precipitation accumulation (mm)	3.50	.001
10	April 15 - July 1 precipitation accumulation (mm)	-4.83	.000
16	Maximum air temperature since the previous sampling date ($^{\circ}\text{C}$)	2.82	.007

Vegetative Phenology. Eight independent environmental variables were selected from the possible variables to form the best regression model. The variables chosen and their significance levels are listed in Table V. The regression model calculated is Listed below:

$$Y = 7.479 + .043X_1 - .021X_4 - .032X_7 - .168X_9 - .945X_{10} - .942X_{11} + 1.115X_{12} + .029X_{16}$$

where Y_{19} = vegetative phenology.

The regression model was highly significant when tested by analysis of variance. The F- statistic was calculated as 10.64 (P .001). The independent variables present in the regression model accounted for

58.38 percent of the variability of the vegetative phenology. The adjusted multiple correlation coefficient was used to determine the best regression model.

Table V. Descriptions and significances of independent variables used in the analysis of vegetative phenology of Agropyron spicatum.

Variable	Description	T-value	Significance
1	Soil temperature at 38 cm depth on the sampling date (°C)	1.83	.074
4	Soil moisture % at 46-60 cm depth on the sampling date	-1.10	.278
7	Soil moisture % at 46-60 cm depth on the previous sampling date	-2.45	.018
9	October 15 - April 15 precipitation accumulation	-1.17	.243
10	April 15 - July 1 precipitation accumulation	-2.25	.029
11	July 1 - September 1 precipitation accumulation	-4.09	.000
12	September 1 - October 15 precipitation accumulation	2.15	.037
16	Maximum air temperature since the previous sampling date (°C)	1.63	.111

Three factors promoted plant vegetative phenologic development: soil temperature at 38 cm depth (X_1), fall precipitation (X_{12}), and the maximum air temperature since the previous sampling date (X_{16}). Five factors prolonged phenologic development: soil moisture percent at 46-60 cm on the sampling date (X_4), soil moisture percent at 46-60 cm on the previous sampling date (X_7), winter precipitation (X_9), spring precipitation (X_{10}), and summer precipitation (X_{11}).

ANALYSES FOR ARTEMISIA NOVA

Thirteen of the seventeen independent variables were entered into the selection pool. The remaining variables were eliminated due to high multicollinearity.

Reproductive Phenology. Six environmental variables were chosen from the selection pool of eleven variables. The variables chosen and their significance levels are listed in Table VI. The regression model calculated from this subset of variables is:

$$Y_{18} = 17.79 - .215X_3 - .152X_7 + 1.065X_{11} - .011X_{15} - .164X_{16} \\ - .082X_{17}$$

where Y_{18} = reproductive phenology.

In light of the small sample size the model was highly significant when tested by analysis of variance. The F-statistic was calculated to be 4.48 ($P < .0155$). The independent variables present accounted for 55.11 percent of the variability of the reproductive phenology

One factor promoted phenologic development: July 1 - Sept. 30 precipitation accumulation. Five factors prolonged the phenologic development. They were soil moisture percent at 15-30 cm on the sampling date (X_3), soil moisture percent at 46-61 cm (X_7), ambient air temperature on the sampling date (X_{15}), maximum air temperature since the previous sampling date (X_{16}), and minimum air temperature since the previous sampling date (X_{17}).

Vegetative Phenology. Five environmental variables were chosen from the selection pool of thirteen independent variables. The

Table VI. Descriptions and significances of independent variables used in the analysis of reproductive phenology of *Artemisia nova*.

Variable	Description	T-value	Significance
3	Soil moisture % at 15-30 cm depth on the sampling date	-3.08	.011
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-1.97	.075
11	July 1 - Sept. 1 precipitation accumulation (mm)	2.18	.052
15	Ambient air temperature on sampling date (°C)	-1.63	.131
16	Maximum air temperature since the previous sampling date (°C)	-3.23	.008
17	Minimum air temperature since the previous sampling date (°C)	-1.66	.125

variables chosen and their significance levels are listed in Table VII.

The regression model calculated from this subset is:

$$Y_{19} = 4.69 - .057X_3 - .023X_5 - .088X_7 + .003X_{15} - .052X_{16}$$

where Y_{19} = vegetative phenology.

In light of the small sample size the model was highly significant when tested by analysis of variance. The F-statistic was calculated to be 6.15 ($P < .0009$). The independent variables present in the model account for 47.90 percent of the variability of the vegetative phenology.

One variable promoted phenological development: the ambient air temperature on the sampling date (X_{15}). Four factors prolonged phenological development: soil moisture percent at 15-30 cm on the sampling date (X_3), soil moisture percent at 0-15 cm depth on the previous sampling date (X_5), ambient air temperature on the sampling

date (X_{15}), and maximum air temperature since the previous sampling date (X_{16}).

Table VII. Descriptions and significances of independent variables used in analysis of vegetative phenology of Artemisia nova.

Variable	Description	T-value	Significance
3	Soil moisture percent at 15-30 cm on the sampling date	-3.24	.004
5	Soil moisture % at 0-15 cm depth on the previous sampling date	-1.01	.323
7	Soil moisture % at 46-61 cm depth on the previous sampling date	-1.74	.095
15	Ambient air temperature on the sampling date ($^{\circ}\text{C}$)	2.54	.018
16	Maximum air temperature since the previous sampling date ($^{\circ}\text{C}$)	-1.42	.170

ANALYSES FOR ARTEMISIA TRIDENTATA

Fifteen of the seventeen independent variables were entered into the selection pool. The variables of species production and total production were eliminated due to high multicollinearity.

Reproductive Phenology. Nine independent environmental variables were chosen from the selection pool. The variables chosen and their significance levels are listed in Table VIII. The regression model calculated from the chosen variables is:

$$Y_{18} = 10.163 - .048X_2 + .050X_3 - .059X_6 - .730X_{11} + .087X_{12} \\ - .034X_{15} + .043X_{16} + .038X_{17}$$

where Y_{18} = reproductive phenology.

The model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated as 8.30 (P .0001). The independent variables accounted for 34.62 percent of the big sagebrush reproductive phenology.

Four factors promoted phenologic development, the soil moisture percent at 16-30 cm on the sampling date (X_3), the September 1 - October 15 precipitation accumulation (X_{12}), the maximum air temperature since the previous sampling date (X_{16}), and the minimum air temperature since the previous sampling date (X_{17}). Five factors prolonged the phenologic development. They were soil moisture percent at 0-15 cm on the sampling date (X_2), soil moisture percent at 46-60 cm on the sampling date (X_4), soil moisture percent at 16-30 cm on the previous sampling date (X_6), July 1 - September 1 precipitation accumulation (X_{11}), and ambient air temperature on the sampling date (X_{15}).

Table VIII. Description and significances of independent variables used in the analysis of Artemisia tridentata reproductive phenology.

Variable	Description	T-statistic	Significance
2	Soil moisture % at 0-15 cm depth on the sampling date	-1.47	.143
3	Soil moisture % at 15-30 cm depth on the sampling date	1.40	.164
4	Soil moisture % at 46-61 cm depth on the sampling date	-1.74	.084
6	Soil moisture % at 15-30 cm depth on the previous sampling date	-3.08	.003
11	July 1 - September 1 precipitation accumulation	-2.80	.006
12	September 1 - October 15 precipitation accumulation	1.62	.107
15	Ambient air temperature on the sampling date (°C)	-2.99	.003
16	Maximum air temperature since the previous sampling date (°C)	2.81	.006
17	Minimum air temperature since the previous sampling date (°C)	2.16	.032

Vegetative Phenology. Seven independent environmental variables were chosen from the selection pool. The variables chosen and their significance levels are listed in Table IX. The regression model calculated from the chosen variables is:

$$Y_{19} = 4.483 - .029X_4 - .029X_6 + .047X_9 - .314X_{10} - .026X_{15} + .029X_{16} + .043X_{17}$$

where Y_{19} = vegetative phenology.

The model was highly significant when tested by analysis of variance procedures. The F- statistic was calculated as 11.22 (P .0001).

Table IX. Descriptions and significances of independent variables used in the analysis of *Artemisia tridentata* vegetative phenology.

Variable	Description	T-statistic	Significance
4	Soil moisture % at 46-61 cm depth on the sampling date	-1.95	.053
6	Soil moisture % at 15-30 cm depth on the previous sampling date	-2.36	.020
9	October 15 - April 15 precipitation accumulation (mm)	1.31	.191
10	July 1 - September 1 precipitation accumulation (mm)	-2.48	.015
15	Ambient air temperature on the sampling date (°C)	-2.64	.009
16	Maximum air temperature since the previous sampling date (°C)	2.80	.006
17	Minimum air temperature since the previous sampling date (°C)	3.81	.000

The independent variables accounted for 36.58 percent of the big sagebrush vegetative phenology.

Three variables promoted vegetative phenologic development. They were October 15- April 15 precipitation accumulation (X_9), maximum air temperature since the previous sampling date (X_{16}), and minimum air temperature since the previous sampling date (X_{17}). Four factors prolonged the phenologic development. They were the soil moisture at 46-60 cm depth on the sampling date (X_4), soil moisture at 15-30 cm depth on the previous sampling date (X_6), July 1 - September 1 precipitation accumulation (X_{12}) and ambient air temperature on the sampling date (X_{15}).

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